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SESSIONAL PAPERS.

VOLUME XV.—PART V.

FOURTH SESSION OF THE FOURTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO.

Session 1882-3.

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No. 56.. Return shewing in detail the amounts heretofore expended in the Preparation of Plans for or otherwise respecting new Parliament Buildings, and the amounts, if any, remaining unpaid on account thereof, giving the dates of the several payments made and the names of the persons to whom payments have been made, and to whom the moneys remain due, and the amounts paid and payable to them respectively.

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REPORT

RELATING TO THE REGISTRATION OF

BIRTHS, MARRIAGES, AND DEATHS

IN THE

PROVINCE OF ONTARIO,

FOR THE YEAR ENDING 31ST DECEMBER,

1881.

Printed by Order of the Legislative Assembly.

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1882.

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Registrar-General's Office, Ontario,

Toronto, October 29th, 1882.

To His Honour the Honourable John Beverley Robinson,
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

In compliance with the Statute in that behalf, the undersigned respectfully presents to Your Honour the Annual Report of Births, Marriages and Deaths for the year ending 31st December, 1881.

Respectfully submitted,

ARTHUR S. HARDY,
Registrar-General.

REPORT

RELATING TO THE REGISTRATION OF BIRTHS, MARRIAGES AND DEATHS

IN THE

PROVINCE OF ONTARIO,

FOR THE YEAR ENDING 31ST DECEMBER, 1881.

PARLIAMENT BUILDINGS,

TORONTO, October 29th, 1882.

To the Honourable A. S. HARDY,
Registrar-General of the Province of Ontario.

SIR,—I have the honour to submit the Annual Report relating to the Registration of Births, Marriages and Deaths, in the Province during the year ending 31st December 1881.

The total number of registrations of Births, Marriages and Deaths for the year is 76, 641, an increase over the returns for 1880 of 1,744, or 4.3 per cent.

The Births number 40,714, less by 1,598 than was registered in 1880.

There are 13,106 Marriages registered during the year, or 323 more than in 1880.

Of Deaths there are returned 22,821, being an increase over the number registered in 1880 of 3,019.

The decrease in Births is 3.7 per cent.; the increase in Marriages, 2.5 per cent.; and the increase in Deaths, 15.2 per cent.

TABLE 1.- Table shewing the Total Number of Births, Marriages and Deaths in each County of the Province of Ontario in 1881, with the Increase or Decrease.

COUNTIES.	Number of Births, 1881.	Increase over 1880.	Decrease.	Number of Marriages 1881.	Increase over 1880.	Decrease.	Number of Deaths, 1881.	Increase over 1880.	Decrease.	Total Number of B.,M.& D. 1881.	Total Number of B.,M.& D. 1880.	Increase.	Decrease.
Algoma and Thunder Bay	334		8	89	6		120	27		543	518	25	
Brant	703	24		237	26		438	27		1378	1301	77	
Bruce	1393	88		396		32	551	84		2340	2200	140	
Carleton	1268		198	439		64	1151	238		2858	2882		24
Duffe in *	497	497		140	140		174	174		811		811	
Elgin	714	73		335	36		395	62		1444	1273	171	
Essex	1363		48	375	48		842	103		2580	2477	103	
Frontenac	886		115	280		4	605	11		1771	1879		108
Grey	1231		116	401		42	488	44		2120	2234		114
Haldimand	522		5	177			273	56		972	921	51	
Halton	484		29	139		1	274	67		897	860	37	
Hastings	922		160	389	2		638	30		1949	2077		128
Huron	1720	129		435		46	764	179		2919	2657	262	
Kent	981		156	395		8	579	65		1955	2054		99
Lambton	1017		80	329	74		543	77		1889	1818	71	
Lanark	458		116	199	6		278	63		935	982		47
Leeds and Grenville	902		136	411	49		690	95		2003	1995	8	
Lennox and Addington	448		52	232	22		285	21		965	974		9

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Lincoln	660	.....	90	192	.....	73	454	.....	43	1306	1512	.....	206
Middlesex	1909	.....	37	651	23	.....	1492	434	.....	4052	3632	420	.....
Muskoka and Parry Sound	737	.....	54	181	31	.....	233	48	.....	1151	1126	25	.....
Norfolk	733	.....	73	263	4	.....	394	53	.....	1390	1406	.....	16
Northumberland and Durham	1196	.....	62	490	.....	22	754	25	.....	2440	2499	.....	59
Ontario	1205	32	.....	321	.....	44	584	86	.....	2110	2036	74	.....
Oxford	1118	6	.....	382	42	.....	569	80	.....	2069	1941	128	.....
Peel	561	.....	23	156	.....	19	281	13	.....	1001	1030	.....	29
Perth	1107	.....	127	345	.....	3	566	25	.....	2018	2123	.....	105
Peterborough	857	.....	54	210	.....	10	398	102	.....	1465	1427	38	.....
Prescott and Russell	1093	.....	97	217	60	.....	378	.....	2	1688	1727	.....	39
Prince Edward	409	.....	17	150	.....	7	260	.....	7	819	850	.....	31
Renfrew	775	.....	68	259	22	.....	341	113	.....	1375	1308	67	.....
Simcoe	1393	.....	157	451	.....	45	623	.....	4	2467	2673	.....	206
Stormont, Dundas and Glengarry	977	.....	112	348	.....	1	632	.....	7	1957	2077	.....	120
Victoria	761	.....	46	232	22	.....	314	68	.....	1567	1263	44	.....
Waterloo	1180	9	.....	370	7	.....	596	32	.....	2146	2098	48	.....
Welland	718	.....	26	176	.....	38	408	32	.....	1302	1334	.....	32
Wellington	1496	.....	174	462	.....	20	792	32	.....	2750	2912	.....	162
Wentworth	1682	.....	36	588	71	.....	1148	90	.....	3418	3293	125	.....
York	4301	16	.....	1264	111	.....	2516	426	.....	8081	7528	553	.....
Totals	40714	874	2472	13106	802	479	23821	3082	63	76641	74897	3278	1534
	Decrease in Births, 1,598.			Increase in Marriages, 323.			Increase in Deaths, 3,019.			Total increase in B., M. and D., 1,744.			

* The new County of Dufferin was formed in 1880 out of portions of the Counties of Wellington, Grey and Simcoe, which makes it appear that there was a decrease in these counties, which in reality was not the case.

TABLE 2.

TABLE SHEWING THE INCREASE OR DECREASE (as the case may be) OF BIRTHS, MARRIAGES AND DEATHS in the County Towns of Ontario in 1881.

COUNTY TOWNS.	Population by Census, 1881.	BIRTHS.				MARRIAGES.				DEATHS.				TOTAL NUMBER OF BIRTHS, MARRIAGES AND DEATHS.			
		1880.	1881.	Increase.	Decrease.	1880.	1881.	Increase.	Decrease.	1880.	1881.	Increase.	Decrease.	1880.	1881.	Increase.	Decrease.
Brantford	9626	263	247	.....	16	91	110	19	....	196	177	.....	19	550	534	.....	16
Walkerton	2604	76	65	.....	11	42	33	.....	9	21	23	2	.....	139	121	.....	18
Ottawa	27417	667	495	.....	172	319	308	.....	11	563	843	280	....	1549	1646	97	.....
Orangeville	2847	49	53	4	.....	50	59	9	.....	22	24	2	.....	121	136	15	.....
St. Thomas	8370	182	204	22	.....	116	122	6	.....	75	99	24	.....	373	425	52	.....
Sandwich	1144	20	28	8	.....	26	13	.....	13	40	36	.....	4	86	77	.....	9
Kingston	14093	397	363	.....	34	152	160	8	.....	299	283	.....	16	848	806	.....	42
Owen Sound	4426	101	106	5	.....	32	84	52	.....	38	58	20	.....	171	248	77	.....
Cayuga	830	29	15	.....	14	6	9	3	.....	12	15	3	....	47	39	....	8
Milton	1303	39	30	.....	9	10	11	1	.....	11	13	2	.....	60	54	.....	6
Belleville	9516	296	210	.....	86	99	98	.....	1	198	169	.....	29	593	477	.....	116
Goderich	4564	99	111	12	.....	33	31	.....	2	41	73	32	.....	173	215	42	.....
Chatham	7881	155	167	12	.....	162	153	.....	9	125	124	.....	1	442	444	2	.....
Sarnia	3874	106	80	.....	26	28	65	37	.....	47	46	.....	1	181	191	10	.....
Perth	2467	68	62	.....	6	55	47	.....	8	35	40	5	.....	158	149	.....	9

Brockville	7608	181	219	38		67	88	21		107	168	61		355	475	120	
Napanee	2687	96	58		38	65	70	5		61	69	8		222	197		25
St. Catharines	9642	257	172		85	123	70		53	185	195	10		565	437		128
London	19763	487	426		61	252	222		30	393	374		19	1132	1022		110
Simcoe	2646	72	54		18	39	27		12	27	40	13		138	121		17
Cobourg	4957	84	100	16		56	58	2		64	56		8	204	214	10	
Whitby	3140	68	77	9		35	32		3	33	58	25		136	167	31	
Woodstock	5373	139	145	6		62	70	8		61	86	25		262	301	39	
Brampton	2920	101	82		19	42	42			68	80	12		211	204		7
Stratford	8240	197	159		38	57	60	3		99	105	6		353	324		29
Peterborough	6815	189	198	9		94	84		10	98	104	6		381	386	5	
L'Orignal	858	46	7		39	16	1		15	44	6		38	106	14		92
Picton	2975	44	66	21		58	64	6		43	43			146	173	27	
Pembroke	2820	116	77		39	39	61	22		45	49	4		200	187		13
Barrie	4854	120	119		1	54	101	47		71	60		11	245	280	35	
Cornwall	4468	116	91		25	71	69		2	78	85	7		265	245		20
Lindsay	5081	97	96		1	66	86	20		58	72	14		221	254	33	
Berlin	4056	122	125	3		70	76	6		74	77	3		266	278	12	
Welland	1870	36	32		4	21	20		1	11	26	15		68	78	10	
Guelph	9890	289	282		7	81	87	6		123	184	61		493	553	60	
Hamilton	35965	941	957	16		330	396	66		612	648	36		1883	2001	118	
Toronto	86445	2650	2545		105	762	883	121		1510	1690	180		4922	5118	196	
Total	335035	8996	8323	181	854	3081	3970	468	179	5588	6298	856	146	18265	18591	991	665
		Decrease, 673.				Increase, 289.				Increase, 710.				Total Decrease, 326.			

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TABLE 3.

RETURN of BIRTHS, MARRIAGES and DEATHS in the Cities of Ontario, with the Population in each place, and the ratio per 1000 persons living, also the principal causes of death in those places.

CITIES.	Population.	BIRTHS.		MARRIAGES.		DEATHS.		PRINCIPAL CAUSES OF DEATH.															
								Miasmatic Diseases.															
		Number returned.	Ratio to 1000 of the Population.	Number returned.	Ratio to 1000 of the Population.	Number returned.	Ratio to 1000 of the Population.	Diphtheria.	Dysentery.	Diarrhœa.	Typhoid Fever.	Scarlet Fever.	Other Fevers.	Phthisis or Consumption.	Brain Disease.	Heart Disease.	Pneumonia.	Lung Disease.	Old Age.	Measles.	Small-pox.	Cholera Infantum.
Toronto	86445	2545	29.4	883	10.2	1690	19.5	44	12	109	57	9	2	174	43	74	81	14	68	2	...	62
Hamilton	35965	957	26.6	396	11.0	648	18.0	9	3	36	23	13	....	58	15	34	33	3	19	1	...	17
Ottawa	27417	495	18.0	308	11.2	843	30.7	81	3	72	3	2	4	62	11	16	16	1	35	3	....	3
London	19763	426	21.5	222	11.2	374	18.9	4	3	21	4	2	2	38	11	23	13	3	26	....	....	19
Kingston	14093	363	25.7	160	11.4	283	20.0	1	....	5	6	4	1	32	4	19	12	....	33	....	....	5
Brantford	9626	247	25.6	110	11.4	177	18.4	5	3	2	5	16	....	10	5	6	18	....	5	1	....	3
St. Catharines	9642	172	17.8	70	7.2	195	20.2	8	3	2	11	7	3	31	2	11	4	...	8	....	....	7
Guelph	9890	282	28.5	87	8.7	184	18.5	10	3	8	2	5	1	28	3	7	5	....	10	....	....	2
Belleville	9516	210	22.0	98	10.2	169	17.7	3	2	....	6	5	...	23	3	6	1	....	18	....	....	3
St. Thomas	8370	204	24.3	122	14.5	99	11.8	....	4	7	6	....	3	8	4	4	4	....	5	1	....	3
Total	230727	5901	25.5	2456	10.6	4662	20.2	165	36	265	123	63	16	464	101	200	187	21	227	8	....	124

Remarks on Tables 1, 2, and 3.

Of the 39 counties in the Province of Ontario 27 return this year a decreased number of births as compared with the year 1880.

The ratio of births to population according to the last census in Ontario for the year 1881 is nearly 22 per 1,000, whereas about 30 births per 1,000 are estimated to be the actual number. The returns from the county towns show a decrease of 624. In 1880 there were 8,947 births, while in 1881 there are only 8,323. Ottawa with a population of 27,417 returns only 495 births, or 18 per 1,000 of the population. St. Catharines shows a decrease of 85 or the same ratio of 18 per 1,000, showing that the returns from these two cities are very incomplete. Toronto, although showing a decrease of 105, has a ratio of nearly 30 per 1,000. Belleville, with a decrease of 86, gives a ratio of 22 per 1,000. London has a decrease of 61, with a ratio of 21 per 1,000; while the decreases in the number of births registered in remaining county towns are very small. Fourteen towns return an increase of births. The Town of Brockville returns the largest increase, viz., 38, with a ratio to population of 28 per 1,000. St. Thomas being next shows 22 of an increase, with a ratio of 24 per 1,000. Picton shows an increase of 21, with a ratio of 22 per 1,000.

The ratio of births to population in the county towns is 25 per 1,000. In the ten cities it is a little more, 25.5 per 1,000. Five of the cities return a higher ratio than this; thus Toronto gives nearly 30 per 1,000, Guelph 28 per 1,000, Hamilton 26 per 1,000, Kingston 25.7 per 1,000, and Brantford 25.6 per 1,000, while the other five cities show less than the average ratio 25.5 per 1,000.

Marriages.

As the population increases, so will the number of marriages increase. This is shown by the number of marriages registered in Ontario in 1881; thus 13,106 marriages are returned as having been celebrated during the year, this number being an increase over 1880 of 323. The ratio of marriages to population in the whole Province is 7 per 1,000. In the county towns the ratio is much larger, being nearly 12 per 1,000. This excess is caused (as pointed out in former Reports) by parties residing in the rural districts resorting to the towns to have their marriages solemnized.

Deaths.

The number of deaths registered in the Province in 1881 is 3,019, or 15.2 per cent. more than in 1880, which number increases the ratio of deaths to 12 per 1,000 of the population, while in 1880 the ratio was only 10 per 1,000. It is computed that if all the deaths were registered, the ratio would be from 16 to 18 per 1,000. This ratio is reached in the county towns, the number of deaths in 1881 being 6,298, or 18.8 per 1,000, thereby indicating that the returns from these places are more complete than from the rural parts of the Province. Nearly every county shows an increase in the number of deaths

registered. Thus Middlesex reported the largest increase, 434, or a ratio of deaths of nearly 16 per 1,000 of the population. This is, however, in a great measure due to the sad accident which occurred on the river Thames by the upsetting of the steamer Victoria, when nearly 200 persons lost their lives. York returns nearly as large an increase, viz., 426, giving a ratio of 16 per 1,000. Carleton comes next with an increase of 238, or a ratio of 22 per 1,000. Huron is next in order, reporting 179 more deaths than in 1880. Thirty-four counties return an increased, and five a decreased, number of deaths this year.

The total increase in the 34 counties is 3,082, and the total decrease in the other five counties only 63. Hence it may be inferred that the registration of deaths is steadily approaching completeness.

In the returns from the cities it will be noticed that Ottawa not only has the largest increase of deaths, 280; but has also the largest ratio of deaths to population, this being 30 per 1,000. This city appears to be subject to yearly epidemics. Thus last year, 1880, small-pox by its ravages carried off a large number of the population; this year, 1881 diphtheria and diarrhœa appear to have caused a large increase in the mortality returns. These epidemics occurring with regularity from year to year should incite the authorities to investigate the cause of them with a view to their prevention or amelioration, as, no doubt, proper sanitary measures would lessen the mortality from them as it is proved to have done in other places.

Toronto returns an increase of 180, giving a ratio of 19.5 to the thousand. Of the ten cities six return more, and four cities less, deaths registered this year, 1881, than in 1880. The largest decrease is in Belleville, it being 29, giving a ratio of 17.7 per 1,000. St. Thomas has the lowest ratio of deaths, it being 11 per 1,000. Whether this is owing to the healthy condition of the city through improved sanitary measures, or to incomplete returns is not easy to determine. It is to be hoped that the first cause accounting for the low mortality is the true one. The average ratio of the total number of deaths in the ten cities of the Province for the year 1881 is 20.2 per 1,000 of the population. Last year, 1880, it was only 18.5 per 1,000.

BIRTHS.

BIRTHS.

TABLE 4.

Births by Months, 1881.

Sex.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	1885	1783	2004	1759	1763	1587	1754	1819	1728	1688	1582	1795	21147
Females	1674	1644	1855	1632	1623	1529	1630	1609	1606	1562	1492	1711	19567
Male births to 100 Female births.....	112.6	108.4	108.0	107.7	108.6	103.1	107.5	113.0	107.5	108.0	106.0	104.9	108.0

TABLE 5.

Order of Births by Months, 1880 and 1881.

Months.	1880.			Months.	1881.		
	Males.	Females.	Total.		Males.	Females.	Total.
March	2057	1925	3982	March	2004	1855	3859
September.....	2006	1754	3760	January.....	1885	1674	3559
August	1852	1842	3694	December	1795	1711	3506
April	1886	1685	3571	August	1819	1609	3428
February	1855	1695	3550	February	1783	1644	3427
January.....	1812	1706	3518	April	1759	1632	3391
July	1812	1627	3439	May	1763	1623	3386
May	1806	1630	3436	July	1754	1630	3384
October	1752	1682	3434	September..	1728	1606	3334
June	1748	1590	3338	October	1688	1562	3250
November.....	1708	1606	3314	June	1587	1529	3116
December	1725	1551	3276	November	1582	1492	3074
	22019	20293	42312		21147	19567	40714

QUARTERLY RETURN OF BIRTHS, 1880-1881.

	1880.			1881.		
	Males.	Females	Total.	Males.	Females	Total.
Quarter ending March 31st	5724	5326	11050	5672	5173	10845
" June 30th	5440	4905	10345	5109	4784	9893
" September 30th	5670	5223	10893	5301	4845	10146
" December 31st	5185	4839	10024	5065	4765	9830
Total	22019	20293	42312	21147	19567	40714

TABLE 6.

The following statement shows the total number of births in each quarter for the last eight years, with percentages :—

QUARTER.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	Total for 8 years.	Percentage of the whole 8 years.
January to March	7610	6998	10012	12580	10652	11333	11050	10845	81080	27.3
April to June	7048	6481	9566	9899	9688	10484	10345	9893	73404	24.7
July to September	7034	6474	9623	9854	10075	9944	10893	10146	74043	25.0
October to December	6546	6015	9257	7624	9821	9274	10024	9830	68391	23.0
Total	28238	25968	38458	39957	40236	41035	42312	40714	296918	100.00

TABLE 7.

The number of births within the several specified periods was as follows :—

For the year ..... 40,714—Males, 21,147 ; Females, 19,567.

	Average.		Average.		Average.
" month	3,392	"	1,762 ;	"	1,630.
" week	783	"	406 ;	"	376.
" day	111	"	57 ;	"	53.

The difference between the male and female births reported during the past ten years is shewn by the following table:—

In 1872.....1,027 more male children were born than female.
" 1873.....1,037 " "
" 1874.....1,073 " "
" 1875.....1,064 " "
" 1876..... 987 " "
" 1877.....1,361 " "
" 1878.....1,780 " "
" 1879.....1,651 " "
" 1880..... 1,726 " "
" 1881.....1,580 " "

TABLE 8.

COMPARATIVE STATEMENT of the Birth Rate in the Cities of Ontario for six years.

CITIES.	1876.			1877.			1878.			1879.			1880.			1881.		
	Population as returned by the Assessors.	Number of Births.	Birth rate per 1,000.	Population.	Number of Births.	Birth rate per 1,000.	Population.	Number of Births.	Birth rate per 1,000.	Population.	Number of Births.	Birth rate per 1,000.	Population according to Census.	Number of Births.	Birth rate per 1,000 living.	Population according to Census of 1881.	Number of Births.	Birth rate per 1,000.
Toronto	71673	1984	27	67386	2222	32	70867	2637	37	73813	2638	35	83410	2650	31.7	86445	2545	29.4
Hamilton	32641	644	19	32641	940	28	33511	1008	30	34268	994	29	35041	941	26.7	39565	957	26.6
Ottawa	25000	458	18	24431	339	13	24000	474	19	24015	479	19	26830	667	24.8	27417	495	18.0
London	18196	456	25	18898	465	24	19186	521	27	19666	539	27	19370	487	24.6	19763	426	21.5
St. Catharines	12870	137	10	13143	164	12	11079	172	15	10475	186	17	9465	257	27.1	9642	172	17.8
Kingston	12786	416	32	13253	349	26	14072	352	25	14358	889	27	13925	397	28.5	14093	363	25.7
Belleville	9768	284	29	11192	321	28	9612	301	31	9789	330	33	9295	296	31.8	9516	210	22.0
Brantford	9444	237	25	10631	278	26	10792	262	24	10587	254	24	9475	263	27.7	9626	247	25.6
Guelph	9017	311	34	9677	341	35	9918	340	34	10072	298	29	9589	289	30.1	9890	282	28.5
St. Thomas	5527	109	19	5954	123	20	6446	125	19	7217	154	21	7753	182	23.6	8370	204	24.3

TABLE 9.

Illegitimate Births, Twins and Triplets.

Year.	Illegitimate Births.			No. of Twins.	No. of Triplets.
	No.	Proportion to the whole number of births.	Ratio in every 1,000		
1872	235	One in every 99 Births.	10.0	76	0
1873	229	" 129 "	8.3	200	1
1874	196	" 144 "	6.9	255	2
1875	198	" 131 "	4.8	264	1
1876	392	" 98 "	10.1	349	1
1877	529	" 75 "	13.2	411	5
1878	575	" 70 "	14.2	425	9
1879	524	" 78 "	12.7	378	1
1880	671	" 63 "	15.8	407	6
1881	748	" 54 "	18.3	384	3
Average for the ten years.	429	One in every 94 Births.	12.1	314	Nearly 3.

Births by Months.

(*See* Table 4, *see* Appendix, page iv.)

The same variation in the proportion between male and female births in the different months appears this year as in former years though not in the same months. In 1880 the greatest disparity was in the month of September; this year it is in the month of August, the male births being in proportion to females as 113 to 100. January comes next with the proportion of 112.6 to 100; while the months of February, March, May, and October have nearly the same proportion, viz., 108 males to 100 females. There are 1,580 more male than female births reported. The proportion for the whole year between the sexes is 108 males to 100 females. The month of March this year again returns the highest number of births, 3,859, as it did in 1880. November returns the lowest of any month, 3,074. In 1880 December reported the lowest.

Quarterly Return of Births.

(*See* Tables 5, 6, 7, and 8.)

The largest number of births almost invariably occurs in the first quarter of the year, and the next largest in the third quarter—such is the case this year. Thus 26.6 per cent. of all the births occurred in the first quarter, 24.2 in the second, 25 per cent. in the third, and 24.2 in the fourth quarter, there being a difference of only 2 per cent. between the highest and lowest quarter.

Illegitimate.

(*See* Table 9.)

Again the registered births of illegitimate children shew an increase in numbers. In 1880 the number reported was 671, while this year shows 748 as reported, being an increase of 77, thus making the proportion of one illegitimate birth in every 54 births, or 18.3 per thousand births, an increase not desirable to record for this Province, although it may be still less than in other counties, as is fully shewn in the report for 1880. Of these 748 illegitimate births, 249, or 33 per cent., are returned from seven of the ten cities of the Province. Toronto registered 138, or 18 per cent.; Hamilton, 46, or 6 per cent.; London, 26, or 3.4 per cent.; Kingston, 25, or 3.4 per cent.; Ottawa, 8, or 1 per cent.; Belleville, 4, and Guelph, 2. St. Catharines, Brantford and St. Thomas register none of these births. The county of Carleton returns the very large number of 144 of these births, being nearly 20 per cent. of the whole number of illegitimate births in the Province. There are 1,268 births reported from this county, therefore, in every nine births one was illegitimate. The greater proportion of these births is reported from a public institution situate in the township of Nepean, on the border of and near Ottawa city.

Twins and Triplets.

(*See* Table 9.)

The number of twin births registered is 384, or 23 less than in 1880. Three cases of triplets are recorded, one in the county of Huron, one in the county of Lanark, and one in the county of Welland. In 1880 there were six cases returned.

Of every 54 births one is a twin, and of every 10,178 one is a triplet.

MARRIAGES.

MARRIAGES.

TABLE 10.—MARRIAGES BY DENOMINATIONS.

Of the whole number of persons married in 1880, the percentages of those whose religious denominations were given were as follows:—

36.19	per cent.	(or 1	in every	2.76)	were	Methodists.
20.38	"	(" 1	"	4.92)	"	Presbyterians.
16.70	"	(" 1	"	5.98)	"	Episcopalians.
12.66	"	(" 1	"	7.89)	"	Roman Catholic.
5.43	"	(" 1	"	18.39)	"	Baptists.
2.78	"	(" 1	"	35.90)	"	Lutherans.
2.15	"	(" 1	"	46.48)	"	Bible Christians.
.82	"	(" 1	"	120.59)	"	Congregationalists.
.52	"	(" 1	"	192.22)	"	Mennonites.
.45	"	(" 1	"	220.40)	"	Quakers.
1.12	"	(" 1	"	89.08)	"	of other denominations.

The percentages in 1881 were as follows:—

35.28	per cent.	(or 1	in every	2.83)	were	Methodists.
20.06	"	(" 1	"	4.98)	"	Presbyterians.
17.71	"	(" 1	"	5.64)	"	Episcopalians.
13.60	"	(" 1	"	7.35)	"	Roman Catholics.
5.85	"	(" 1	"	17.06)	"	Baptists.
2.22	"	(" 1	"	44.85)	"	Lutherans.
2.16	"	(" 1	"	46.21)	"	Bible Christians.
.80	"	(" 1	"	111.26)	"	Congregationalists.
.58	"	(" 1	"	170.55)	"	Mennonites.
.05	"	(" 1	"	1728.33)	"	Quakers.
1.53	"	(" 1	"	64.97)	"	of other denominations.

TABLE 11.—MARRIAGES CLASSIFIED BY MONTHS.

Quarterly Return of Marriages, 1880 and 1881.

	1880.		1881.	
	Number of Marriages.	Per cent. of the whole number.	Number of Marriages.	Per cent. of the whole number.
Quarter ending 31st March	3304	25.9	3357	25.6
" 30th June	2740	21.5	2830	21.6
" 30th September	2523	19.7	2705	20.7
" 31st December	4155	32.5	4157	31.7
Date of marriage omitted	61	.4	57	.4
	12783	100.00	13106	100.00

Marriages by Months in Numerical Order, 1880–1881.

1880.			
December	1696	December	1593
October	1317	October	1314
January	1205	November	1250
September	1162	September	1180
November	1142	March	1169
March	1070	January	1165
February	1029	February	1023
April	955	June	1010
June	943	April	918
May	842	May	902
July	686	August	801
August	675	July	724

The average number of marriages per quarter for 1881 was.... 3276
" " month " 1092
" " week " 252
" " day " 36

TABLE 12.—MARRIAGES BY AGES.

The proportion of males to females married during the different quinquennial periods of life, for the years 1880-1881, to the whole number of marriages, is shewn in the appended table:—

QUINQUENNIAL PERIODS OF LIFE.	1880. Whole number of marriages, 12783.				1881. Whole number of marriages, 13106.			
	Males.		Females.		Males.		Females.	
	Number married.	Per cent. of the whole.	Number married.	Per cent. of the whole.	Number married.	Per cent. of the whole.	Number married.	Per cent. of the whole.
Under 20 years	129	1.00	2698	21.19	162	1.24	2795	21.31
From 20 to 25 years	5051	39.51	6482	50.79	4859	37.07	6578	50.19
" 25 " 30 "	4464	34.90	2202	17.23	4493	34.28	2272	17.34
" 30 " 35 "	1502	11.75	656	5.13	1738	13.26	657	4.98
" 35 " 40 "	650	4.94	285	2.22	767	5.85	312	2.38
" 40 " 45 "	375	2.94	185	1.44	374	2.85	186	1.41
" 45 " 50 "	206	1.61	90	.71	241	1.84	108	.85
" 50 " 55 "	132	1.04	58	.46	155	1.18	72	.55
" 55 " 60 "	84	.65	27	.22	115	.88	38	.29
" 60 " 65 "	76	.59	25	.20	74	.56	29	.22
" 65 " 70 "	37	.29	8	.06	40	.31	12	.09
" 70 " 75 "	30	.24	1	.007	31	.24	5	.04
" 75 " 80 "	10	.07	0	.00	18	.14	1	.007
" 80 and over	5	.04	0	.00	2	.02	0	.00
Ages not given	52	.40	56	.44	37	.28	48	.37
	12783	100.00	12783	100.00	13106	100.00	13106	100.00

TABLE 13.

The following, taken from among the marriages in which the bridegroom was far advanced in life, exhibit in some instances great disparity in the ages of the contracting parties:—

COUNTIES.	Bridegroom the Elder.		
	Occupation of Bridegroom.	Age of Bridegroom.	Age of Bride.
arleton	Farmer	70	60
Elgin	"	74	73
Essex	Merchant	70	53
"	Farmer	78	52
Frontenac	"	72	50
Grey	Gentleman	77	60
"	Farmer	81	32
"	Labourer	70	20
Hastings		77	72
Huron	Farmer	70	57
Kent	"	75	72
Leeds and Grenville	"	72	58
Lennox and Addington	Gentleman	77	67
Lincoln	Farmer	75	64
Northumberland and Durham	Gentleman	79	62
" "	Farmer	71	62
Peel	"	72	55
Prince Edward	"	74	61
"	"	76	66
Renfrew	Labourer	74	16
Stormont, Dundas and Glengarry	Farmer	79	75
Wentworth	"	81	47
York	"	70	46
"	"	75	65
"	Bank Clerk	74	58

The following are among the instances in which the bride was older than the bridegroom :—

COUNTIES.	BRIDE THE ELDER.		
	Occupation of Bridegroom.	Age of Bridegroom.	Age of Bride.
Haldimand	Gentleman	69	72
Kent	Labourer	67	75

MARRIAGES.

(For General Table, *see* Appendix, pages xii. to xxix.)

(*See Table 10.*)

Of the 26,212 persons married in 1881, 9,147 are Methodists. They rank the highest in number this year as they have done for several years. There is a slight increase in the numbers of Episcopalians and Roman Catholics married. The other denominations have nearly the same per centage as in 1880. Amongst Methodists, Roman Catholics, Baptists and Congregationalists there are more females of those denominations than males married. In the other denominations the males predominate.

(*See Table 11.*)

October and December again return the highest number of marriages, as they did in 1879 and 1880. July is the lowest instead of August in those years.

The counties returning the largest number of marriages are those in which the cities and chief towns are situated. York, including Toronto, heads the list with 1,264 marriages ; Middlesex, including London, 651 ; Wentworth, including Hamilton, 588. Northumberland and Durham, including the towns of Cobourg and Port Hope, 490, and Wellington, including Guelph, 462. Halton is again the lowest, returning only 139 marriages ; but, as stated in last year's report, it is a small county and has no large towns within its limits.

(*See Table 12.*)

It will be observed that 2,793 females and 162 males have been married before they were 20 years of age, but, the largest number both of males and females have been married between 20 and 25 years. There are 11,437 altogether (4,859 males and 6,578 females), or 43 per cent. of all the persons married this year.

(See Table 13.)

Again several marriages are reported in which the parties have been far advanced in life, at the time of their marriage. Two instances are given where the bridegrooms were each 81 years old, their brides being 47 and 32 years of age respectively. The marriage which exhibited the greatest disparity in ages, was that of a man aged 74 married to a girl of only 16 years. The united ages of the oldest couple married is 154 years, of the youngest 33, the bridegroom being 18 and the bride 15.

This year the status of each person is given, as to whether they were bachelors or widowers, spinsters or widows, at the time of marriage. We find that of 13,106 males married, 11,693 were bachelors and the remaining 1,413 were widowers. Of the females married, 12,387 were spinsters and 719 were widows.

DEATHS

DEATHS.

TABLE 14.—DEATHS AT DIFFERENT AGES.

The death rate under one year, from one to five, from five to ten, and in each decennial period thereafter, for the years 1876, 1877, 1878, 1879, 1880 and 1881, is shewn in the following table :—

	1876.		1877.		1878.		1879.		1880.		1881.	
	No.	Per cent. of the whole.	No.	Per cent. of the whole.	No.	Per cent. of the whole.	No.	Per cent. of the whole.	No.	Per cent. of the whole.	No.	Per cent. of the whole.
Total under 1 year.....	3844	21.4	4704	24.1	3963	22.9	3869	22.1	4379	22.8	5246	23.6
" from 1 year to 5 years..	2471	13.7	2841	14.6	2321	13.4	2159	2.3	2795	14.6	3120	14.0
Total under 5 years..	6315	35.1	7541	38.7	6284	36.3	6028	34.4	7174	37.4	8366	37.6
Total from 5 to 10 years....	1012	5.6	1064	5.6	904	5.2	777	4.4	976	5.1	1144	5.2
" 10 " 20 "	1341	7.5	1391	7.1	1187	6.8	1057	6.0	1197	6.2	1499	6.8
" 20 " 30 "	1696	9.5	1687	8.6	1623	9.4	1622	9.4	1785	9.3	2027	9.1
" 30 " 40 "	1316	7.4	1310	6.7	1201	7.0	1205	6.8	1192	6.2	1451	6.5
" 40 " 50 "	1116	6.2	1444	5.8	1026	6.0	1112	6.3	1142	5.9	1302	5.9
" 50 " 60 "	1099	6.1	1098	5.6	1067	6.1	1116	6.6	1119	5.8	1278	5.8
" 60 " 70 "	1311	7.3	1389	7.1	1276	7.4	1486	8.5	1468	7.6	1549	6.9
" 70 " 80 "	1595	9.0	1572	8.1	1551	9.0	1675	9.6	1803	9.4	2058	9.3
" 80 " 90 "	917	5.1	1009	5.2	951	5.5	1071	6.2	1112	5.9	1269	5.7
" 90 " 100 " and over	228	1.2	272	1.5	214	1.3	269	1.5	235	1.2	265	1.2
	17946	100.00	19472	100.00	17284	100.00	17486	100.00	19203	100.0	22208	100.0
Age not given	677	3.6	581	2.8	524	2.9	490	2.7	599	3.0	613	2.7
Whole number of deaths	18623	.....	20053	.....	17808	.....	17958	.....	19802	.....	22821	.....

TABLE 15.

Quarterly Return of Deaths.

	Males.	Females.	Total.	Per cent. of the whole.
Quarter ending March 31st.....	2917	2703	5620	24.6
" " June 30th.....	2802	2623	5425	23.8
" " September 30th	3235	2962	6197	27.2
" " December 31st	2871	2708	5579	24.4
	11825	10996	22821	100.00

Monthly Return of Deaths, in Rotation According to Numbers.

Males.		Females.		Totals.	
August	1121	August	1095	January	1767
September	1096	September	1008	February	1818
March	1034	March	1001	March	2035
October	1023	October	977	April	1962
July	1018	April	965	May	1819
April	997	May	902	June	1644
January	966	February	901	July	1877
December	939	December	878	August	2216
February	917	July	859	September	2104
May	917	November	853	October	2000
November	909	January	801	November	1762
June	888	June	756	December	1817
	11825		10996		22821

DEATHS AT DIFFERENT AGES AND MONTHS.

(See Appendix, page xxxii.)

(*See Table 14.*)

The number of deaths returned under one year is 5,246, and from one to five years, 3,120. This is largely in excess of the number reported in 1880, but the percentage to the whole number of deaths is not correspondingly so large, owing to the increased returns in the number of deaths for the year. Moreover, 3,592 persons have lived to the allotted duration of the life of man, three score years and ten; 1,269 lived to be over 80 years, and 265 to 90 years and upwards.

(*See Table 15.*)

August, this year, has been the most fatal month to both sexes. 2,216 (1,121 males and 1,095 females) dying in that month. In 1880, March returned the largest number, and June, this year, returns the lowest mortality of both sexes. Last year, January was the lowest for males and June for females.

The third quarter of the year has the largest record of deaths. In previous years, the first quarter was generally the highest. The second quarter has the lowest record, or 772 less than the highest quarter. The difference between the returns for the other quarters is not very great. The number of deaths in the second half year is 731 more than it was in the first half year. This is the reverse of last year, when the first half returned 724 more deaths than the second.

The Death Wave for the Year.

(See Table Appendix, page liv. and lv.)

The two highest points in the mortality appear to be in March and August, and the two lowest points in January and June. For tracing these two rises and falls in the death wave, we commence with the low point, in January, which returns 1,767 deaths, the lowest month but one in the year, or 150 less than in the previous December. A change

takes place in the next month, February, and we find a rise of 51 deaths; in the next month, March, this rise in the mortality becomes very rapid, the deaths being 2,035, or 217 or 12 per cent. more than in February, and attaining the first of the two high points in the year. The wave descends in April, there being 73 less deaths, while this fall is greater in May, the decrease being 175. It drops still lower in June, and here reaches the lowest point of mortality, the deaths in that month being 1,644, or the lowest record of any month of the year. In the next month, July, a rapid rise takes place, the number of deaths increasing by 233. This rise in the death rate increases in August, when it attains the highest point in the year, 2,216 deaths being registered. A fall, but not a rapid one, takes place in the next two months, September and October; but still a high rate of mortality is maintained.

In November the fall becomes more rapid, the decrease being 238, or 11 per cent. In December, the mortality changes and a slight increase appears to be followed by a fall in January, which month invariably has a low mortality. Of the total deaths recorded in the year, only 7.7 per cent. were registered in that month. Last year, 7.2 per cent. were so recorded. In preceding years it was much larger. This year, the highest point in the death wave was during the hot dry weather in summer; in 1879 and 1880, it was during the cold wet weather of early spring.

The same remarks in reference to the high mortality in March and April, made in the last Report, are applicable this year, viz.: "That it was owing to the large number of deaths from diseases of the lungs at that season of the year."

TABLE 16.

Comparison of the Death Rate in the Cities of Ontario with some of the Cities and Towns in the United States:—

Ontario.	Population.	Number of Deaths.	Ratio to 1000 living.	United States.	Population.	Number of Deaths.	Ratio to 1000 living.
Toronto	86445	1690	19.5	Rochester, New York	89363	1420	15.9
Hamilton	35965	648	18.0	Hartford, Connecticut	42533	969	22.8
Ottawa	27417	843	30.7	Bridgeport, "	29148	516	17.7
London	19763	374	18.9	Yonkers, New York	18892	340	18.0
Kingston	14993	283	20.0	Dayton, Ohio	38677	534	13.8
Guelph	9890	184	18.5	Cambridge, Massachusetts	52740	1140	21.6
St. Catharines	9642	195	20.2	Minneapolis, Minnesota	48343	788	16.3
Brantford	9626	177	18.4	Oakland, California	35000	455	13.6
Belleville	9516	169	17.7	Norfolk, Virginia	21966	606	27.6
St. Thomas	8370	99	11.8	Meriden, Connecticut	18340	262	14.3

TABLE 17.

ONTARIO.

In 1875 there were 4,941 male decedents to 4,909 females, or 100.8 males to 100 females.
" 1876 " 9,746 " " 8,877 " 109 " "
" 1877 " 10,603 " " 9,450 " 112 " "
" 1878 " 9,358 " " 8,450 " 110 " "
" 1879 " 9,458 " " 8,500 " 111 " "
" 1880 " 10,290 " " 9,512 " 108 " "
" 1881 " 11,825 " " 10,996 " 107.5 " "

The percentage for the 7 years shews that 109.1 males died to every 100 females.

In 1875 there were 13,503 male births and 12,465 females, or 108 males to 100 females
" 1876 " 19,733 " " 18,746 " 105 " "
" 1877 " 20,659 " " 19,298 " 107 " "
" 1878 " 21,008 " " 19,228 " 109 " "
" 1879 " 21,343 " " 19,692 " 108 " "
" 1880 " 22,019 " " 20,293 " 108 " "
" 1881 " 21,147 " " 19,567 " 108 " "

RHODE ISLAND.

Deaths in	1875.....	2,108	males to	2,209	females, or	95.4	males to	100 females.
"	1876.....	1,969	"	2,147	"	91.7	"	"
"	1877.....	2,132	"	2,138	"	92.0	"	"
"	1878.....	2,161	"	2,280	"	94.8	"	"
"	1879.....	2,183	"	2,289	"	95.4	"	"
Births in	1875.....	3,362	"	3,146	"	106.9	"	"
"	1876.....	3,291	"	3,038	"	108.3	"	"
"	1877.....	3,163	"	3,072	"	103.0	"	"
"	1878.....	3,402	"	3,312	"	102.7	"	"
"	1879.....	3,259	"	3,091	"	105.4	"	"

MASSACHUSETTS.

Deaths in	1875.....	17,329	males to	17,619	females, or	98.4	males to	100 females.
"	1876.....	16,485	"	16,669	"	98.8	"	"
"	1877.....	15,427	"	15,894	"	97.1	"	"
"	1878.....	15,384	"	15,986	"	95.6	"	"
"	1879.....	15,682	"	16,142	"	96.8	"	"
Births in	1875.....	22,457	"	21,513	"	104.3	"	"
"	1876.....	21,149	"	20,410	"	103.6	"	"
"	1877.....	21,466	"	20,375	"	105.3	"	"
"	1878.....	21,199	"	20,022	"	105.8	"	"
"	1879.....	20,658	"	19,623	"	102.0	"	"

TABLE 18.

The following is a Record of the Ten Highest Causes of Death for the years 1871, 1872, 1873, 1874, 1876, 1877, 1878, 1879, 1880, and 1881.

1871.		1872.		1873.		1874.		1876.	
Whole number of Deaths registered	9182	Whole number of Deaths registered.....	10745	Whole number of Deaths registered.....	11069	Whole number of Deaths registered.....	10352	Whole number of Deaths registered.....	18623
Phthisis	1042	Phthisis	1120	Phthisis	1217	Phthisis	1143	Phthisis...	2259
Scarlatina	630	Scarlatina	642	Old Age.....	778	Pneumonia	642	Old Age	1405
Pneumonia	508	Old Age	545	Lung Disease.....	533	Old Age	536	Diphtheria	864
Exhaustion	467	Pneumonia	514	Typhoid Fever	401	Typhoid Fever	369	Pneumonia	786
Old Age	414	Diarrhœa	407	Heart Disease	399	Heart Disease	351	Lung Disease.....	662
Heart Disease...	333	Heart Disease	350	Cerebro-spinal Meningitis	324	Diarrhœa	334	Heart Disease	569
Typhoid Fever	261	Dysentery	342	Stomach Disease	321	Enteritis	283	Convulsions	644
Dropsy	241	Exhaustion.....	332	Brain Disease.....	278	Convulsions	267	Diarrhœa	539
Convulsions	209	Typhoid Fever	329	Pneumonia	276	Dropsy.....	239	Typhoid Fever	436
Diarrhœa	207	Brain Disease	318	Cholera Infantum	276	Lung Disease	231	Dropsy.....	381

No Report in 1875.

1877.		1878.		1879.		1880.		1881.	
Whole number of Death registered	20053	Whole number of Deaths registered.....	17808	Whole number of Deaths registered.....	17958	Whole number of Deaths registered.....	19802	Whole number of Deaths registered.....	22821
Phthisis	2157	Phthisis	1999	Phthisis	2065	Phthisis	2154	Phthisis	2397
Old Age	1661	Old Age	1722	Old Age	1749	Old Age	1658	Old Age	1972
Infantile Debility	1164	Infantile Debility.....	1100	Infantile Debility.....	955	Infantile Debility	1300	Infantile Debility.....	1481
Pneumonia	1050	Diphtheria	956	Pneumonia	942	Pneumonia	1257	Diphtheria	1171
Diphtheria	964	Pneumonia	826	Heart Disease	784	Diphtheria	822	Pneumonia	1137
Scarlet Fever	717	Heart Disease	621	Diphtheria	574	Heart Disease	760	Heart Disease	886
Heart Disease.....	697	Convulsions	454	Convulsions	445	Convulsions	518	Diarrhœa	818
Diarrhœa	666	Enteritis	415	Dropsy.....	400	Bronchitis	438	Typhoid Fever	616
Convulsions	573	Diarrhœa	401	Enteritis	393	Croup	429	Croup	533
Enteritis	497	Typhoid Fever	379	Diarrhœa	340	Congestion of Lungs ...	419	Convulsions	509

TABLE 19.

Ten Highest Causes of Death, with their percentages of the whole number of Deaths from specified causes, for the years 1877, 1878, 1879, 1880 and 1881.

1877.			1878.			1879.			1880.			1881.		
Whole number of Deaths from specified causes..		19,260	Whole number of Deaths from specified causes..		16,852	Whole number of Deaths from specified causes..		16,897	Whole number of Deaths from specified causes..		19,152	Whole number of Deaths from specified causes..		21,997
Diseases	No. of Deaths.	Per cent. of the whole.	Diseases.	No. of Deaths.	Per cent. of the whole.	Diseases.	No. of Deaths.	Per cent. of the whole.	Diseases.	No. of Deaths.	Per cent. of the whole.	Diseases.	No. of Deaths.	Per cent. of the whole.
Phthisis	2157	11.2	Phthisis	1999	11.8	Phthisis	2065	12.2	Phthisis	2154	11.2	Phthisis	2397	10.8
Old Age	1661	8.6	Old Age	1722	10.2	Old Age	1749	10.3	Old Age	1658	8.6	Old Age	1972	8.9
Infantile Debility	1164	6.0	Infantile Debility	1100	6.5	Infantile Debility	955	5.6	Infantile Debility	1300	6.7	Infantile Debility	1481	6.7
Pneumonia	1050	5.4	Diphtheria	986	5.8	Pneumonia	942	5.5	Pneumonia	1257	6.5	Diphtheria	1171	5.3
Diphtheria	964	5.0	Pneumonia	826	4.9	Heart Disease	784	4.6	Diptheria	822	4.2	Pneumonia	1137	5.1
Scarlet Fever	717	3.7	Heart Disease	621	3.6	Diptheria	574	3.4	Heart Disease	760	3.0	Heart Disease	886	4.0
Heart Disease	697	3.6	Convulsions	454	2.1	Convulsions	445	2.6	Convulsion	518	2.7	Diarrhœa	818	3.7
Diarrhœa	666	3.4	Enteritis	417	2.4	Dropsy	400	2.3	Bronchitis	438	2.3	Typhoid Fever	616	2.8
Convulsions	573	2 9	Diarrhœa	401	2.3	Enteritis	393	2.3	Croup	429	2.2	Croup	533	2.4
Enteritis	497	2.5	Typhoid Fever	379	2.1	Diarrhœa	340	2.0	Congest'n of Lungs	419	2.1	Convulsions	509	2.3

TABLE 20.

TABLE shewing the number of deaths in each of the ten highest causes of death in the Counties of the Province, with the percentage to the whole number of deaths in each County, for 1881.

COUNTIES.	Phthisis.		Old Age.		Infantile Debility.		Diphtheria.		Pneumonia.		Heart Disease.		Diarrhœa.		Typhoid Fever.		Croup.		Convulsions.		Total No. of Deaths.
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	
Algoma and Thunder Bay	12	10	7	6	4	3	6	5	.....	.....	3	2	4	3	3	2	1	....	2	1	120
Brant	38	8	48	11	13	3	15	3	39	9	23	5	14	3	14	3	12	2	8	1	438
Bruce	61	11	42	7	48	9	35	6	28	5	20	3	5	1	13	2	15	3	14	2	551
Carleton	99	8	66	5	152	13	99	8	30	2	31	2	83	7	4	....	23	2	14	1	1151
Dufferin	12	7	26	15	13	7	18	10	9	5	8	4	1	.....	2	1	....	....	4	2	174
Elgin	37	9	33	8	19	5	22	6	21	5	20	5	15	4	11	3	18	4	2	.....	395
Essex	87	10	53	6	104	12	59	7	42	5	16	2	34	4	39	4	24	3	16	2	842
Frontenac	71	11	70	11	31	5	11	2	24	4	33	5	17	2	9	1	9	1	13	2	605
Grey	36	7	53	10	27	5	33	7	22	4	23	4	16	3	6	1	20	4	11	2	488
Haldimand	34	12	24	8	12	4	16	5	18	6	13	4	14	5	6	2	9	3	11	4	273
Halton	26	9	18	6	8	3	7	2	18	6	10	4	8	3	7	2	11	4	12	4	274
Hastings	88	13	67	10	41	6	20	3	21	3	16	2	8	1	26	4	12	2	16	2	638
Huron	74	9	81	10	36	5	41	5	52	7	31	4	23	3	18	2	24	3	21	3	764
Kent	56	9	39	6	38	6	47	8	41	7	16	3	27	5	44	7	15	3	4	.....	579
Lambton	35	6	24	4	31	5	29	5	32	5	21	4	18	3	21	4	9	1	13	2	543
Lanark	38	13	41	15	10	3	19	7	17	6	9	2	5	2	4	1	4	1	.....	.....	278
Leeds and Grenville	108	15	90	13	30	4	62	9	37	5	32	5	12	1	16	2	10	1	14	2	690
Lennox and Addington	38	13	41	14	14	5	5	2	15	5	11	4	11	4	3	1	2	....	8	3	285
Lincoln	66	14	30	6	22	5	18	4	22	5	17	4	17	4	20	4	12	2	14	3	454
Middlesex	136	9	119	8	66	4	53	3	58	4	69	5	53	3	26	2	28	2	15	1	1492
Muskoka and Parry Sound	23	10	15	6	29	12	11	5	7	3	3	1	4	1	8	3	14	6	8	3	233
Norfolk	38	10	38	10	21	5	24	6	34	9	12	3	17	4	8	2	2	....	10	3	394
Northumberland and Durham	114	15	86	11	25	3	43	5	45	5	24	3	28	4	16	2	11	1	13	1	754
Ontario	60	10	65	11	30	5	21	3	45	8	24	4	25	4	26	4	4	....	17	3	584
Oxford	62	10	57	10	28	5	31	5	45	8	22	4	11	2	14	2	11	2	8	1	569
Peel	28	10	33	11	14	4	3	1	12	4	10	3	11	4	4	1	1	....	8	2	281
Perth	45	8	46	8	35	6	44	8	28	5	21	4	11	2	18	3	17	3	18	3	566
Peterborough	39	10	32	8	37	9	17	4	13	3	17	4	14	3	7	1	3	....	19	5	398

TABLE 20—*Continued.*

COUNTIES.	Phthisis.		Old Age.		Infantile Debility.		Diphtheria.		Pneumonia.		Heart Disease.		Diarrhœa.		Typhoid Fever.		Croup.		Convulsions.		Total No. of Deaths.
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	
Prescott and Russell	39	10	28	7	78	20	34	9	11	3	9	2	5	1	5	1	14	4	3	1	378
Prince Edward	46	17	30	11	13	5	12	4	11	4	3	1	4	1	4	1	3	1	2	.....	260
Renfrew	42	12	38	11	17	4	45	13	14	4	9	2	12	3	8	2	12	3	4	1	341
Simcoe	58	9	72	11	45	7	31	5	22	3	21	3	27	4	22	3	16	2	15	2	623
Stormont, Dundas and Glengarry	87	13	89	14	47	7	57	9	36	5	26	4	13	2	8	1	17	2	4	.....	632
Victoria	37	11	31	10	18	6	2	.....	20	6	11	3	4	1	5	1	5	1	5	1	314
Waterloo	67	11	50	8	33	5	21	3	15	2	28	4	16	2	36	6	32	5	16	2	596
Welland	43	10	33	8	14	3	5	1	14	3	17	4	10	2	10	2	2	.....	7	2	408
Wellington	79	10	60	7	38	4	50	6	36	4	36	4	28	3	25	3	24	3	14	2	792
Wentworth	119	10	54	4	68	6	27	2	61	5	53	4	53	4	33	3	37	3	27	2	1148
York	219	8	143	6	172	6	78	3	122	5	118	4	140	6	67	3	50	2	99	4	2516
	2397	10.8	1972	8.9	1481	6.7	1171	5.3	1137	5.1	886	4.0	818	3.7	616	2.8	533	2.4	509	2.3	22821

Remarks on the Ten Highest Causes of Death.

(*See Tables 18, 19, and 20.*)

Phthisis, Old Age and Infantile Debility, still maintain, as they have done for several years, their positions of first, second and third respectively on the list; Diphtheria, Pneumonia and Heart Disease are next in order, Diphtheria, this year, preceding Pneumonia; Convulsions have fallen to the bottom of the list, while Diarrhœa and, Typhoid Fever take the places of Bronchitis and Congestion of the Lungs.

Phthisis (Consumption of Lungs).

The total deaths from Consumption exceed by 243 the number returned for 1880; but, as the increase in the total number of deaths from all causes is 3,019 more than in 1880, the percentage of deaths from Consumption to the total number of deaths in the Province, is less, viz.: 10.5 per cent. this year, as compared with 10.8 per cent. in 1880.

The proportion of deaths of females to males is less than in 1880, there being 26 per cent. more females than males. From 5 to 10 years, four more females than males have died of this disease; from 10 to 15 years, eighteen more; from 15 to 20 years, ninety-two more; from 20 to 30 years, one hundred and thirty-one more; from 30 to 40 years, seventy-six more, and from 40 to 50 years, four more.

The decennial period betwcen 20 and 30 years is always the most fatal one; this year, 763 (316 males and 447 females) have succumbed to this scourge; this being 31 per cent. of the whole number of deaths from Consumption, and about the same rate as in 1880.

The number of deaths from this disease does not vary from the average much for any month with the exceptions of April and September. April returns the highest number, 212, and September the lowest, 179. The first half year returns a few more deaths than the second; while the last quarter of the year appears to have been the most fatal, 620 deaths being returned in that period.

The average of deaths per month is nearly 200, while in 1880, it was 180. In every month, more females than males have died. October appears to have been the most fatal month for females and March for males.

Deaths from Consumption in the Different Counties.

The total number of deaths recorded in the Province, in 1881, is 22,821; of that number, 2,397, or 10.5 per cent. died from Consumption. Some counties, however, returned a much higher, and others a much lower rate than that; but the returns of deaths are not proportionately alike, as is shown by the very low ratio of deaths to population in some of the counties as compared with others. For example: Grey returns a death rate of only 6 per 1,000 of the population, while Essex returns 18 per 1,000. No serious epidemic occurred in Essex during 1881, and there is no reason to believe that the county is so much more unhealthy than Grey, as the returns would indicate. Evidently the registration of deaths is very incomplete in Grey. Prince Edward returns of this disease 17 per cent. of the total number of deaths, its death rate being 11 per 1,000 of the

population. This county has, for the last five years, returned a larger percentage of deaths from this disease than any other county in the Province, the average being 17.4 per cent. of all the deaths in the county. The united counties of Leeds and Grenville return a less percentage this year, from this disease; but still, it is 5 per cent. above the average for the whole Province, its average for the past five years being very high, viz.: 16.4 per cent., and its ratio of deaths to population, 11 per thousand. Lennox and Addington show a large falling off in the number of deaths from Consumption, the percentage, this year, being only 13 per cent., as against 18 per cent. in 1880. The average, however, for the last five years, is high, being 15 per cent., with a ratio of 10.7 deaths per 1,000 of population. The county of Lincoln returns show 14, and the united counties of Northumberland and Durham 15 per cent., having each a ratio of only 9 deaths per 1,000. Generally, it will be found that those counties which return the largest ratio of deaths per 1,000 of the population have comparatively the smallest percentage of deaths from Consumption, as the following counties show: Carleton, with a ratio of 18 deaths per 1,000, only returns 8 per cent. of deaths from this disease; Brant, with a ratio of 13 deaths per 1,000, 8 per cent.; Frontenac, a ratio of 14 per 1,000, 11 per cent.; Middlesex, a ratio of 16 per 1,000, 9 per cent.; Peel, a rate of 17 per 1,000, 10 per cent.; Perth, a ratio of 15 per 1,000, 8 per cent.; Waterloo, a ratio of 14 per 1,000, 11 per cent.; Wentworth, a ratio, of 17 per 1,000, 10 per cent., and York, with a ratio of 16 per 1,000, 9 per cent. On the other hand, as will have been seen, there was a high percentage of deaths from Consumption in those counties which returned a low ratio of deaths to population, viz.: the united counties of Stormont, Dundas and Glengarry return a death rate of 13 per cent. from Consumption, and a ratio of only 9 deaths to 1,000 of the population; Renfrew, 12 per cent., with a ratio of only 8 per 1,000; Prince Edward, 17 per cent., with a ratio of 12 per 1,000; Northumberland and Durham (united), 15 per cent., with a ratio of 9 per 1,000; Leeds and Grenville (united), 15 per cent., with a ratio of 11 per 1,000; Lanark, 13 per cent., with a ratio of 8 per 1,000, and Hastings, 13 per cent., with a ratio of 11 per 1,000. There are some exceptions, such as Lincoln, which has a ratio of 14 deaths per 1,000, and the same per centage of deaths from Consumption; other counties, with a low ratio of deaths to population, have a large percentage of deaths from Consumption, as in Dufferin, where the ratio is 8 per 1,000, the deaths from Consumption are only 7 per cent., and in Simcoe ratio, 8 per 1,000, and 9 per cent. from Consumption.

Fifteen counties return a higher rate than the average for the Province, 10.8 and 24 less.

From these facts, it may be inferred, that in those counties which return the highest percentage of deaths from Consumption, but which have returned a small ratio of deaths to population, the deaths cannot have been all registered.

Consumption in the Cities.

(*See Table 3.*)

The total number of deaths in the ten cities is 4,662, and from Consumption 464, or very nearly 10 per cent. of all the deaths, and one-half per cent. less than the average of

the whole Province. St. Catharines returns the largest percentage (16) of deaths from this disease. Its ratio of deaths to population is also the largest, except Ottawa, it being 20.2 per 1,000. Guelph is the next highest with 15.2 per cent. and a ratio of 18 per 1,000; Belleville is also very high, 13.6 per cent., with a ratio of 17.7 per 1,000; and Brantford is the lowest, 5.6 per cent., with a ratio of 18.4 per 1,000. Hamilton, Brantford, Ottawa, and St. Thomas appear to have less deaths from this disease, in proportion to population, than the other cities.

The death rate for the 10 cities is very high, 20.2 per 1,000. Last year it was only 18.5, and has, in fact, never been so high before. Ottawa returns the highest death rate, 30 per 1,000; in 1880, it was 20.9 per 1,000. This may, however, be accounted for by the large number of deaths returned under the heads of Infantile Debility and Diphtheria; the former disease having carried off 134, or nearly 16 per cent. of all the deaths, and the latter, 81, or nearly 10 per cent. The percentage of deaths from Consumption is low, being 7.3 per cent. Last year, this city suffered from the ravages of Smallpox.

Old Age.

This is the sixth year that Old Age has stood second in the list of the ten highest causes of death, 1,972 persons (969 males and 1,003 females) being registered as dying from it, or 314 more than in 1880; but, in consequence of the increased number of deaths reported, the percentage to the whole in the Province is only slightly increased, *i. e.*, 8.9 per cent. this year to 8.5 in 1880. The non-attendance, in many cases, of medical men upon these old people at the time of their death accounts, in a great measure, for no particular disease, although present, being assigned as the cause of death. It is a remarkable fact, that those counties which return the highest death rate from Consumption also return the largest percentage of deaths from Old Age; Prince Edward, which returned 17 per cent. of deaths from Consumption, also returned 11 per cent. from Old Age; Hastings returned 13 per cent. from Consumption and 10 per cent. from Old Age; Leeds and Grenville, 15 per cent. from Consumption and 13 per cent. from Old Age, while the county of York, which had only 8 per cent. from Consumption, has only 6 per cent. from Old Age, and Lambton, which returned only 6 per cent. from Consumption, returns only 4 per cent. from Old Age.

Infantile Debility.

The large number of 1,481 deaths (829 males and 652 females), being 181 more than last year, is registered under this unsatisfactory heading. The highest number registered in any one month is 201, in August, and the lowest in any one, 77, is in December.

Diphtheria.

This disease is evidently on the increase in the Province. In 1877, it ranked fifth in the ten highest causes of death; it rose to fourth place in 1878, dropped down to sixth position in 1879, and rose again in 1880 to fifth place, and this year, takes the fourth place. The increase in the number of deaths from it, this year, is 349, and after allowing for the increased return of deaths, the percentage of the whole number of deaths returned has increased 1.1 per cent. In the ten cities, there has been one death from Diphtheria

in every 28 deaths, and in the remaining portion of the Province, one in every 15 deaths. Though this fact shows but too closely the fatal character of the disease in rural districts, yet it would be unfair to conclude that the disease is really more prevalent in the latter than in the cities and towns. If we make a comparison of the number of cases of deaths per 1,000 of population occurring from this disease we obtain, after deducting the deaths of children under one year, the following results :—

Place.	No. of Deaths.	Per cent. of all Deaths.	Rate per 1,000 Population.
In Cities	165	5	.7
" County Towns	86	6	.82
" Rest of Province	920	7	.58

While, as will be seen from these figures, the rate per 1,000 is lowest in rural districts, yet it must be remembered that the registrations in these are less complete, and hence the actual death rate from this disease is higher than appears from these figures. The per centage for the whole Province is 5.3 per cent. Renfrew returns 13 per cent., Leeds and Grenville 9 per cent., Perth 8 per cent., Stormont, Dundas and Glengarry 9 per cent., and Essex 7 per cent. Of the ten cities, Ottawa returns the largest mortality from this disease, viz. : 81., or 9.6 per cent. of all the deaths in the city. Toronto is next, with 44 deaths, but the percentage is only 2.6 per cent. In the other 8 cities, the numbers and percentages are small. November returned the most deaths, 182; next in order came October with 154 deaths, and then December, with 147 deaths, being a total of 483 deaths, or 41.2 per cent. of all the deaths from this disease in the last quarter of the year; August had the fewest deaths, viz. : 58. It is the young chiefly who die of this disease. In the decennial period, between 1 and 10 years, 843 died, or 72 per cent. of the whole, and in 931 cases, those who died from this disease had not reached their 16th year.

Pneumonia (Inflammation of the Lungs).

This disease stands fifth on the list this year, while it was fourth last year. Although Pneumonia varied its position in the first years of the decennial period from 1871 to 1881, it has, during the last six years, occupied the fourth or fifth place in the ten highest causes of death. The number of decedents this year from this cause is 1,137, a decrease of 120 from 1880, of which 641 were males and 496 females, or 22 per cent. more of the former than of the latter. This proportion is nearly uniform every year. This excess of males over females appears also in every decennial period of life, except between the ages of 20 and 30 years, when the deaths of females were more numerous. This was the case as well in 1880. Under the age of 5 years, 410 children died from this disease, this being 36 per cent. of the whole number. The next most fatal period appears to be between 60 and 80 years, when 200, or 17 per cent., died. The four months, January, February, March and April return together 602 deaths, or 52 per cent.; April has been the most

fatal month, with 164, and August, the least, with 38 deaths. The different counties return a nearly equal mortality from Pneumonia, but Norfolk and Brant show the highest mortality, as 9 per cent. of the total deaths have been recorded in those two counties; while Carleton and Waterloo shows the lowest, there being only two per cent. from this cause.

Heart Disease.

There is a slight increase in the number of deaths from this disease, but the percentage to the whole is about the same. In 1880, there were 760 deaths, or 4 per cent., while this year there are 886; but, as the return of deaths is much larger this year, the percentage to the whole number is about the same. Of the deaths, 462 are of males and 424 of females. This disease has caused 5 per cent. of the deaths (larger than the average) in the counties of Brant, Elgin, Leeds and Grenville, and Middlesex. In 18 counties the percentage is 4 per cent., the same as the average. Prince Edward and Muskoka show only one per cent., and are the lowest in the Province. In the four decades of life from 40 to 50, from 50 to 60, from 60 to 70, and from 70 to 80 years, there have been 554 deaths from Heart Disease, or 62 per cent. of the whole number; 91 died over 80 years, while 52 died under 10 years, so that the disease appears to be mostly confined to middle life and old age, though 152 died between the ages of 20 and 40 years.

Diarrhœa.

Diarrhœa was not in the list last year, but is now seventh in order, while the registered number of deaths from it is very large, viz.: 818 (433 males, 385 females). In 1880 there were only 407 so reported. The increase is, therefore, 411, or over 100 per cent. Every county except Prescott and Russell, Prince Edward and Welland, reports a large increase in the deaths from this disease. This is especially the case in the following counties: Carleton with an increase of 62, York 59, Wentworth 28, Simcoe 22, Middlesex and Kent 19 each, and Ontario 17. During the last ten years, Diarrhœa has ranged in the ten highest causes of death from 6th to 10th; but no year returned so large a mortality as has this year. Thus, 1877 had 666 cases, or 3.4 per cent. of the whole number of deaths in the Province, but the average for ten years (leaving out 1877) was only a little over 2 per cent., while this year it is 3.7 per cent. It appears to have been epidemic in the counties of Carleton and York, their percentage being much higher than the average. Thus, Carleton has 7 and York 6 per cent. of the total deaths recorded. This is a disease especially of infancy and old age. Thus, 681, or 83 per cent. of the deaths were of children under five years of age, and 82, or 10 per cent., of persons over 60 years; only 55, or 7 per cent., dying between the ages of 5 and 60. More males than females died from this disease during childhood; but more females than males above the age of 60. July, August and September, hot months of the year, were the most fatal, 543 deaths, or 66 per cent. of all the deaths from Diarrhœa, having taken place in these three months, while only 53 deaths from it were registered in the first quarter of the year.

Four of the ten cities return a high mortality from this disease. Thus Ottawa returns 72, or 8 per cent.; Toronto 109, or 6 per cent.; London 24, or 6 per cent., and

Hamilton 36, or 5 per cent. In the other cities the death ratio has been very low from this disease.

Typhoid Fever.

Typhoid Fever has not appeared on the list since 1878, but it is now seen to be eighth in order, this being a very large increase in the number of deaths from it. Thus, 616 cases, 273 more than in 1878 (343 males and 273 females) are reported, this number being 2.8 per cent. of the deaths from all causes; while in 1878 there were 379; in 1879, 308, and in 1880, 372. It appears to have been very fatal in the counties of Essex, Kent and Waterloo, as the large percentage, as compared with the average for the whole Province, 2.8 per cent., plainly shows. Essex returns 39 deaths, which is 4.6 per cent. of the deaths in that county; Hastings, 26 deaths, or 4 per cent.; Kent, 44 death, or 7.6 per cent., and Waterloo, 36 deaths, or 6 per cent. The total number of deaths from all causes in the county towns (which includes the cities), is 6,266; while that from Typhoid Fever is 172, or 2.7 per cent. For the rest of the Province, there is a return of 444 deaths, or 2.6 per cent., or nearly the same as the county towns; and if the ten cities are taken separately, it is found that in them the percentage is about the same; Toronto is the only city above the average. It returns 57 deaths, or 3.3 per cent. of all the deaths in that city.

More deaths are recorded between the ages of 15 and 30 years than during any other period of life. Thus, during this period, 280, or over 45 per cent. died; 87 died under 10 years, 148 between 10 and 20, and 180 between 20 and 30. Of the total deaths, 369, or 60 per cent. occurred during the months of October and November, there being respectively, in those months, 118, 142 and 109. No other month approached any of these months in the number of deaths from this disease.

Croup.

This is the second time that Croup is found on the list, it occupying the same position of 9th that it did last year. Thus, 104 more cases are recorded than in 1880; the number registered this year, is 533 (300 males and 233 females). All the deaths from this disease (except in the case of one female, who died in the period between 15 and 20) are of children under 10 years of age; 332 have died between the ages of one and five; 98 under one, and 90 between 5 and 10. The mortality was the greatest in the months of November, December and January; and was least in July and August.

Convulsions.

This cause of death stood seventh in order in 1878, 1879 and 1880; but, this year, it has declined so much, as compared with the whole number of deaths, that it ranks only tenth. Thus, 518 deaths were registered in 1880; while this year, there are 509—a decrease of 9; but, the percentage, this year, is only 2.3; while, last year, it was 2.7 per cent. of all deaths recorded. The highest number of deaths, 59, was registered in March, and the lowest, 29, in November. The males and females dying of this disease are nearly the same, there being 258 of the former and 251 of the latter.

TABLE 21.

(See Appendix Page lxxvi.)

AVERAGE AGE AT DEATH of Males and Females in the Counties of Ontario for the year 1881.

COUNTIES.	Including Deaths under One Year.						Deducting all who died under One Year.					
	No. of Male Decedents.	Average Age at Death.	No. of Female Decedents.	Average Age at Death.	Total No. of Decedents.	Average Age at Death.	No. of Male Decedents.	Average Age at Death.	No. of Female Decedents.	Average Age at Death.	Total No. of Decedents.	Average Age at Death.
Brant	213	27.6	225	28.9	438	28.8	151	37.3	179	36.1	330	36.7
Bruce	272	27.1	279	24 2	551	25.7	193	37.7	216	31.0	409	34.4
Carleton	695	20.0	546	20.4	1151	20.2	365	32.5	357	30.7	722	31 6
Dufferin	109	29.1	65	34.1	174	31.6	80	39.3	49	45.0	129	42.2
Elgin	209	27.2	186	25.6	395	26.9	137	35.9	148	36.0	285	35.9
Essex	431	20.8	411	21.3	842	21.1	291	29 2	287	29.6	578	29.4
Frontenac	310	31.8	295	36.1	605	33.9	222	40 8	237	44.8	*459	42.8
Grey	217	30 0	271	26 0	488	28.0	159	40.6	203	34.4	362	37.5
Haldimand	153	30.3	120	28.7	273	29.5	114	40.4	96	35.6	210	38.0
Halton	156	33.4	118	38 6	274	36.0	119	40.4	100	45.4	219	42.9
Hastings	321	32.3	317	31.0	638	31.6	249	40.2	255	38.6	504	39.4
Huron	401	29.2	363	31.2	764	30.2	299	37.8	296	37.6	595	37.7
Kent	299	27.6	280	25.2	579	26.4	226	35.8	207	32.1	433	33.9
Lambton	295	23.3	248	25.0	543	24.2	216	31.4	198	31.0	414	31.2
Lanark	142	36.9	136	39.0	278	37.9	116	44.9	119	44.5	235	44 7
Leeds and Grenville	369	32.3	321	35.7	690	34.0	298	38.0	258	41.9	556	39.9
Lennox and Addington	150	34.5	135	31 4	285	32.9	118	43.0	108	39.0	226	41.0
Lincoln	242	32.3	212	27.2	454	29 8	179	41 0	162	34.9	341	37.9
Middlesex	741	29.4	751	27.9	1492	28.6	570	36.9	589	34.1	1159	35.5
Norfolk	206	32.2	188	32.9	394	32.6	150	43.9	160	38.4	310	41.1
Northumberland and Durham	402	34.4	352	32 5	754	33.4	309	43.1	281	39.5	590	41.3
Ontario	303	35.0	281	32.8	584	33.9	223	47.1	231	39.6	454	43.3
Oxford	287	30.4	282	31.4	569	30.9	214	39.0	225	38.3	439	58.6
Peel	147	30.0	134	36 2	281	33.0	98	40.6	110	41.6	208	41.1
Perth	290	27.2	276	32.6	566	30.0	219	35.3	212	41.3	431	38 3
Peterborough	232	24.8	166	23.0	398	23.9	144	37.2	109	33.6	253	35.4
Prescott and Russell	195	21.0	183	18.0	378	22.0	124	39.2	128	25.4	252	32 3
Prince Edward	136	33.8	124	34.9	260	34.4	110	40.8	109	39.3	219	40.1
Renfrew	185	25.1	156	26.7	341	25.9	141	30.9	121	31.8	262	31.3
Simcoe	316	30.6	307	25.3	623	27.9	223	40.9	225	32.3	448	36.6
Stormont, Dundas and Glengarry	328	34.6	304	33.3	632	33.9	260	41.5	232	40.7	492	41.1
Victoria	158	36.1	156	33.5	314	34.8	119	45.2	119	43.3	238	44.3
Waterloo	314	26.8	282	30.9	596	28 8	235	35.0	224	38.6	459	36.8
Welland	193	39.0	215	29.9	408	29 9	146	36.9	173	36 1	319	36.5
Wellington	411	33 2	381	32 1	792	32.6	329	40.7	303	39 2	673	39.9
Wentworth	588	26.0	560	29 4	1148	27.7	392	37.5	429	38.1	821	37.8
York	1315	26.5	1201	26.8	2516	26.7	848	39.2	847	36.7	1695	37.9
	11641	28.0	10827	28.4	22468	28.2	8377	38.5	8302	36.8	16679	37.6

TABLE 22.

Average Age at Death of Males and Females in the Cities of Ontario, for the year 1881.

CITIES.	Including Deaths under One Year.						Deducting all who died under One Year.					
	No. of Male Decedents.	Average Age at Death.	No. of Female Decedents.	Average Age at Death.	Total Decedents.	Average Age at Death.	No. of Male Decedents.	Average Age at Death.	No. of Female Decedents.	Average Age at Death.	Total Decedents.	Average Age at Death.
Toronto	879	24.6	811	25.5	1690	25.0	575	37.1	583	35.2	1158	36.1
Hamilton.....	335	20.2	313	26.2	648	23.2	201	32.7	221	36.8	422	34.7
Ottawa.....	448	17.0	396	16.3	844	16.7	243	30.0	241	26.1	484	28.0
London	186	27.5	188	25.2	374	26.4	127	40.0	132	35.4	259	37.7
Kingston	142	30.0	141	36.5	283	33.2	117	36.0	119	43.0	236	39.5
Brantford.....	74	26.7	71	25.2	145	25.9	55	35.6	52	34.8	107	34.8
St. Catharines.....	97	25.3	98	26.1	195	25.7	74	32.8	69	36.6	143	34.7
Guelph	98	25.1	85	26.6	183	25.8	72	34.0	67	33.4	139	33.7
Belleville	86	32.6	83	29.0	169	30.8	65	42.8	65	36.7	130	39.7
St. Thomas	59	20.5	40	16.7	99	18.6	38	31.2	29	22.6	67	26.9
	2404	23.3	2226	24.7	4630	24.0	1567	35.3	1578	34.4	3145	34.8

TABLE 23.

Nationalities of Decedents over Sixty years of Age.

	English.	Irish.	Scotch.	Canadian.	American.	German.	French.	Swiss.	Other Countries.	Not known.	Total.
Deaths between 60 and 70	328	470	245	322	76	56	4	2	9	37	1549
" " 70 " 80	372	659	354	403	122	66	8	0	3	71	2058
" " 80 " 90	218	388	257	198	117	37	3	1	3	47	1269
" " 90 " upw'rds	27	107	46	33	36	5	0	0	1	10	265
Total deaths over 60....	945	1624	902	956	351	164	15	3	16	165	5141

TABLE 24.

List of Centenarians, 1881.

Names.	Sex.	Occupation.	Where Born.	Age at Death.	Where Died.
James Bailey	M.	Butcher	Ireland	100 years	Township of Amabel, Bruce County.
Diana Cooper	F.	Farmer's wife	England	104 "	" Culross, " "
Jane Edwards	F.	"	Ireland	100 "	" Marlborough, Carleton County.
William Gordon	M.	Farmer	Scotland	101 "	" Melancthon, Grey "
Hugh Robertson	M.	"	Ireland	101 "	" West Wawanosh, Huron "
Ann Splan	F.		"	106 "	Town of Goderich, Huron County.
Lucy Peterson	F.		Maryland, U. S.	100 "	Township of Raleigh, Kent County.
Alexander McNab	M.	Farmer	Scotland	112 "	" Enniskillen, Lambton County.
Betsy Henery	F.	Farmer's wife	Ireland	100 "	" Sheffield, Lennox & Addington Co.
Margaret Cummer	F.	Widow	"	100 "	" Adelaide, Middlesex County.
Rachel Patrick	F.	"	"	100 "	" London, " "
James Tuck	M.	Farmer	England	101 "	" Haldimand, Northumberland Co.
Thomas Fallis	M.	"	Ireland	102 "	" Cavan, "
Margaret Turner	F.	Spinster	Scotland	102 "	" Bowmanville, "
J. Hough	F.		United States	102 "	" Hope, "
Mary McNab	F.		Islay, Scotland	101 "	" Cannington, Ontario County.
Mary Nixon	F.		Tyrone, Ireland	115 "	" Hibbert, Perth County.
George Ross	M.	Farmer	Scotland	102 "	" Caledonia, Prescott County.
Mary Wheeler	F.		Ireland	103 "	" N. Marysburgh, Prince Edward Co.
Daniel Moriarity	M.	Farmer	"	101 "	" Brougham, Renfrew County.
John McGinnis	M.	Blacksmith	"	103 "	" Flos, Simcoe County.
Timothy Ronan	M.	Shoemaker	"	104 "	" Innisfil, Simcoe County.

DEATHS BY AGES.

(For Table, see Appendix, page lxxvi.)

(*Also, Table 21.*)

The number of deaths in every year, from 1 to 100, as well as those dying under one year is given in this table. The average age of all who died in 1881 is 28.2 years; that of males being 28.0, and of females 28.4 years.

In 1880, the average for the whole, was 31.4; that of males being 31.6, and of females 30.7; hence the average duration of life, this year, for all ages, is less by 3 years; that of males being 3.6, and of females 2.3 years. This decrease is accounted for by the large increase in the return of deaths of children dying at and under one year of age. In 1880, there were, at and under one year, 5,597, or nearly 29 per cent. of the whole number of deaths recorded. This year, there are 6,653 recorded; this being an increase of 1,056; and, as this increase naturally affects the average age, the decline in the average duration of life may thus be accounted for. Twenty-three counties return a higher, and 14 a lower, rate than the average 28.2 years. The rate, in some counties, is very high, in comparison with that in the rest of the Province. Lanark returns 37 years, as the duration of life; while Halton, 36; Leeds and Grenville, Prince Edward, Victoria, Ontario and Frontenac, each returns 34 as the average age of death. These counties will be found to have the lowest percentage of deaths under one year, and largest percentage of persons dying at 70 years and upwards.

In Lanark, 42 deaths are registered as occurring under one year; this being 15 per cent. of the whole number of deaths in the county, while in the whole Province the percentage is 23. There are, also, 76 deaths in this county, of persons who lived to be 70 years and upwards; this number being 27 per cent. of the whole deaths recorded; while the Province, at these ages, only returned 15 per cent. of the total deaths at those ages. Halton returns 15 per cent. of deaths under 1 year, and 19 per cent. at 70 and upwards; Leeds and Grenville 15 per cent. under 1 year, and 23 per cent., at 70 and upwards; while the other counties named have nearly the same proportions. The reverse is the fact in those counties, which return a low average age. In Carleton, where the average duration of life given is only 20 years, the percentage of deaths, under one year, was 36 per cent. of all the deaths in the county; while only 9 per cent. lived to be 70 years and upwards. Essex, with an average of 21 years, has a mortality of 27 per cent. of deaths under 1, and only 9 per cent. of deaths at 70 and upwards. Prescott and Russell, with an average age of 22, returns 30 per cent. of deaths under 1, and 12 per cent. of deaths of persons aged 70 years and upwards.

See Table 22.

In the ten cities, the proportion of deaths of children under one year is much larger, and, therefore, the duration of life is much lower; the number of deaths, under one year, in the ten cities, is 1,485, or 32 per cent. of the whole, while the average age is only 24 years. Ottawa leads, with the alarming number of 360 deaths under one year, or 42 per cent. of all the deaths returned for that city; Hamilton is next, with 34 per cent. of deaths

at this age; St. Thomas is third, with 32 per cent.; Toronto is fourth, with 31 per cent. of deaths under one; while Kingston returns the lowest number, it being only 16 per cent.

If we deduct all who died under one year, the increase in the average age amounts to 9.4 years for the whole Province; for males, 10.5 years, and for females, 8.4 years. In the cities, the increase is much larger; the duration of life for the whole being increased to the extent of 10.8 years; for males, 12 years, and for females, 9.7 years. This shows that the mortality amongst young children is greater in the cities than in the rest of the Province. The proportion of deaths at ages under 20 years, is 48.3, or nearly the same as in 1880. In previous years (with the exception of 1879) it was higher, especially in 1877, when it was 51.4 per cent. There were 660 more males than females who died during this period of life; but, there were 1,580 more males than females born.

Under 1 year	26	per cent.	more males than females died.		
From 1 to 5	3	"	"	"	"
" 5 to 10	4	"	"	"	"
" 10 to 15	13	"	"	"	"
" 15 to 20	17	"	more females than males died.		
" 20 to 30	28	"	"	"	"
" 30 to 40	43	"	"	"	"
" 40 to 50	3	"	more males than females died.		
" 50 to 60	16	"	"	"	"
" 60 to 70	30	"	"	"	"
" 70 to 80	24	"	"	"	"
" 80 to 90	15	"	"	"	"
" 90 to 100 and over	13	"	"	"	"

TABLE 25.

Deaths by Occupations (for Table *see* Appendix, page clx).

Over the Average Age, 56 years nearly.

OCCUPATIONS.	No. of Deaths.	Average Age at Death.	OCCUPATIONS.	No. of Deaths.	Average Age at Death.
		Years.			Years.
Soldiers and Pensioners	54	70	Tanners and Curriers	10	59
Gentlemen	228	70	Millwrights	10	58
Masons	37	66	Miners	6	58
Weavers	37	66	Pedlars	8	58
Provincial Land Surveyors	5	65	Coopers	23	57
Gardeners	28	62	Public Officials	77	57
Clergymen	39	61	Millers	30	56
Farmers	2159	60	Stonecutters	9	56
Shoemakers	93	60	Bricklayers	12	56

TABLE 25.—Deaths by Occupations—*Continued.*

Under the Average Age.

OCCUPATIONS.	No. of Deaths.	Average Age at Death.	OCCUPATIONS.	No. of Deaths.	Average Age at Death.
		Years.			Years.
Contractors and Builders	17	55	Sailors	29	45
Plasterers	10	55	Saddlers and Harness Makers	13	45
Brewers and Distillers	13	54	Barbers	11	44
Tailors	46	54	Musicians	9	44
Undertakers	1	54	Painters	27	43
Carpenters	159	53	Brickmakers	3	42
Labourers	771	52	Engineers	28	42
Blacksmiths	82	51	Machinists	23	42
Merchants	143	51	Bakers and Confectioners	17	41
Chemists and Druggists	16	50	Domestic Servants	90	41
Tinsmiths	8	50	Book-keepers and Clerks	50	41
Physicians	39	50	Moulders	10	40
Agents	30	49	Dentists	3	40
Butchers	20	48	Teachers	68	40
Cabinet Makers	27	47	Railroad Employés	58	40
Tavern keepers	63	47	Seamstresses	16	40
Lawyers	22	47	Editors	2	38
Hunters and Fishermen	11	47	Sawyers	9	38
Cooks	4	46	Printers	20	36
Carriages and Waggon Makers	36	46	Salesmen and Clerks	41	36
Watchmakers and Jewellers	12	46	Lumbermen	13	34
Bankers	13	46	Artists	4	31
Teamsters	24	46	Milliners and Dressmakers	32	31
Other Mechanics	48	45	Tobacconists and Cigar Makers	8	29
Manufacturers	20	45	Telegraph Operators	3	25

TABLE 26.

TEN OCCUPATIONS giving the Highest Average Age at Death in 1881 compared with 1880.

1880.	No. of Deaths.	Average Age at Death.	1881.	No. of Deaths.	Average Age at Death.
		Years.			Years.
Provincial Land Surveyors	1	71	Gentlemen	228	70
Pedlars	7	69	Soldiers and Pensioners	54	70
Volunteers and Pensioners	37	69	Masons	37	66
Weavers	32	68	Weavers	37	66
Gentlemen	144	67	Provincial Land Surveyors	5	65
Contractors and Builders	21	67	Gardeners	28	62
Bakers and Confectioners	19	64	Clergymen	39	61
Tanners	10	64	Farmers	2519	60
Tailors	47	64	Shoemakers	93	60
Public Officials	57	63	Tanners and Curriers	10	59

Ten Occupations giving the lowest Average Age at Death in 1881 compared with 1880.

1880.	No. of Deaths.	Average Age at Death.	1881.	No. of Deaths.	Average Age at Death.
		Years.			Years.
Telegraph Operators	9	24	Telegraph Operators	3	25
Tinsmiths	12	30	Tobacconists and Cigar Makers	8	29
Printers	9	32	Milliners and Dressmakers	32	31
Milliners and Dressmakers	24	34	Artists	4	31
Bankers	9	35	Lumbermen	13	34
Seamstresses	20	39	Salesmen and Clerks	41	36
Salesmen and Clerks	36	39	Printers	20	36
Painters	33	40	Sawyers	9	38
Carriage and Waggon Makers	23	46	Editors	2	38
Bookkeepers	24	47	Seamstresses	16	40

The average age at death of those whose occupations were given, for the last eight years, is as follows:—

For 1873	52.8	years.
" 1874	55.2	"
" 1875	no report.	
" 1876	55.7	years.
" 1877	56.1	"
" 1878	57.1	"
" 1879	57.6	"
" 1880	57.3	"
" 1881	56	nearly.

The deaths, in 1881, of persons whose occupations were given, reach 9,676, or 42¼ per cent. of the whole number registered.

In 1880, there were 8,251 deaths, or 41.6 per cent. so returned. From 1873 to 1880, there was a gradual rise in the average age, at death, of those whose occupations were given. In 1880, there was a decline of 0.37 of a year, and this year, of 1.3 years. This corresponds with the decrease in the average age of all who died in those years.

(*See Table 25.*)

The average age of those persons, who followed 18 of the 68 occupations enumerated, is above, and the remaining 50 below the general average. Prominent amongst those whose ages appear above the average are Gentlemen and Farmers, their ages being respectively, 70 and 60 years. A few other occupations return a larger average age than Farmers; but the numbers, of those callings dying, are small in comparison to the number of deaths of Farmers, which this year, amounts to 2,519, while the average number of deaths of those of the occupations, where the ages are greater than those of Farmers, is only 34; hence, Gentlemen and Farmers appear to live longer in this Province than do people of any other class.

(*See Table 26.*)

Pedlars, Contractors, Bakers, Tailors, and Public Officials who occupied places in the list of the ten occupations, which returned the highest average ages, do not appear there this year by reason of decrease in the average age. Their places are taken by Masons, Gardeners, Clergymen, Farmers and Shoemakers, whose average ages at death have increased. Farmers have always occupied a place in the list with the single exception of last year.

The five occupations on the list giving the lowest average of life last year are those of Telegraph Operators, having 24 years, Tinsmiths 30, Painters 32, Milliners and Dressmakers 34, and Bankers 35. This year, Telegraph Operators again have the lowest average age, it being 25, or but one year in advance of their former length of life. Tobacconists and Cigar Makers are greatly reduced this year in their average duration of

life. Last year, their average age was 43 years; this year, only 29. Artists and lumbermen, also, show a large decrease; their average ages, last year, being 42 and 43 years respectively; while, this year, they are only 31 and 34 years. Milliners and Dressmakers are the third lowest this year, with 31 years; last year, they were fourth, with 34 years.

The calling of most of these persons is well known to be prejudicial to long life; the incessant toil and care of a long day's indoor work, depressing the spirits and tiring the body so much, that the desire for outdoor vigorous exercise, so necessary for them, is very much weakened, and they become, in consequence, an easy prey to those diseases arising from a lack of fresh air and exercise. The occupation of lumbering is generally considered healthy, and the low average age recorded against them is, no doubt, caused by the many accidents endangering life, to which they are subject while following their occupation. But, while these facts are doubtless important factors, in the explanation of the low life averages for these several occupations, it must be remembered that the great proportion of those engaged in such occupations are young persons. Especially is this true of workers in tobacco factories, lumber shanties and telegraph operators. The great proportion of those employed in banks are young men; while, it is doubtless true, that many of those engaged as Milliners and Dressmakers become enrolled in the marriage register while comparatively young. Such causes serve to explain, at least in some degree, the low average ages for those in these several businesses.

TABLE 27.

A Statistical Classification of the number of Deaths of persons whose Occupations were specified, giving the Number, Average and Aggregate Ages.

OCCUPATIONS.	Number of Persons.	Ages at Death.	
		Aggregate.	Average.
Classes and Occupations	5447	303426	56 years.
1. Cultivators of the Earth	2547	152846	60 years.
2. Mechanics	889	46591	52 "
3. Labourers	805	41966	52 "
4. Merchants, Financiers, Agents, Etc.	392	18111	46 "
5. Professional Men	524	30658	58 "
6. Other Employments	152	7066	52 "
7. Females	138	5348	38 "
1. Cultivators of the Earth	2547	152846	60 years.
Farmers	2519	151097	60 years.
Gardeners	28	1749	62 "
2. Mechanics	889	46591	52 years.
Brickmakers	3	128	42 years.
Blacksmiths	82	4243	51 "
Brewers and Distillers	13	710	54 "
Bricklayers	12	671	56 "
Barbers	11	485	44 "
Butchers	20	971	48 "
Bakers and Confectioners	17	700	41 "
Carpenters	159	8503	53 "
Cabinetmakers	27	1282	47 "
Coopers	23	1324	57 "
Cooks	4	187	46 "
Contractors and Builders	17	940	55 "
Carriage and Waggonmakers	36	1665	46 "
Masons	37	2438	66 "
Machinists	23	960	41 "
Moulders	10	405	40 "
Millers	30	1706	56 "
Millwrights	10	585	58 "
Miners	6	349	58 "
Other Mechanics	48	2190	45 "
Painters	27	1170	43 "
Printers	20	727	36 "
Plasterers	10	557	55 "
Stonecutters	9	411	56 "
Shoemakers	93	5572	60 "
Saddlers and Harnessmakers	13	584	45 "
Sawyers	9	349	38 "
Tinsmiths	8	397	50 "
Tobacconists and Cigarmakers	8	237	29 "
Tailors	46	2493	54 "
Tanners and Curriers	10	597	59 "
Undertakers	1	54	54 "
Watchmakers and Jewellers	12	560	46 "
Weavers	37	2441	66 "

TABLE 27—*Continued.*

OCCUPATIONS.	Number of Persons.	Ages at Death.	
		Aggregate.	Average.
3. Labourers	805	41966	52 years.
Labourers	771	40413	52 years.
Pedlars	8	463	58 "
Teamsters	24	1090	46 "
4. Merchants, Financiers, Agents, Etc.	392	18111	46 years.
Agents	30	1471	49 years.
Book-keepers	50	2044	41 "
Bankers	13	598	46 "
Chemists and Druggists	16	796	50 "
Manufacturers	20	915	45 "
Merchants	143	7322	51 "
Tavern-keepers	63	2974	47 "
Telegraph Operators	3	75	25 "
Salesmen and Clerks	41	1476	36 "
Lumbermen	13	440	34 "
5. Professional Men	524	30658	58 years.
Artists	5	126	31 years.
Clergymen	39	2390	61 "
Dentists	3	121	40 "
Engineers	28	1182	42 "
Editors	2	77	38 "
Lawyers	22	1050	47 "
Musicians	9	399	44 "
Physicians	39	1957	50 "
Public Officials	77	4405	57 "
Provincial Land Surveyors	5	337	65 "
Teachers	68	2723	40 "
Gentlemen	228	15879	70 "
6. Other Employments	152	7906	52 years.
Hunters and Fishermen	11	525	47 years.
Railroad Employés	58	2326	40 "
Sailors	29	1329	45 "
Soldiers and Pensioners	54	3726	70 "
7. Females	138	5348	38 years.
Domestic Servants	90	3721	41 years.
Milliners and Dressmakers	32	987	31 "
Seamstresses	16	640	40 "

This classification of deaths by occupations presents many interesting features. As might be expected, cultivators of the soil live the longest; their average age, this year, being 60 years, or four years above the general average of all occupations. There is, however, a falling off of one year, from the average, in 1880. This decrease is the case with every class (except Professional Men, who remain at the same average, 58 years,)

and is caused by the general decline in the duration of life for the whole Province, the cause of which has already been stated. Mechanics, the second of the various classes, average 52 years. Last year, their average was 54 years. Carpenters and Shoemakers return the largest number, viz.: 159 and 93, with an average life of 53 and 60 years respectively. Masons and Weavers, this year, have the highest average age, viz.: 66 years; Weavers have, in many years, had a higher average than this. Tobacconists and Cigarmakers return the lowest average, viz.: 29 years; but, there were only 8 deaths reported. Labourers show an average of 56 years; while their average would, no doubt, have been higher, if, as is the case every year, so many had not lost their lives through accident. Their average age is, however, good, being four years below that of the general average age. The next class, that of Merchants, appears to have had short lives, in comparison with some of the other classes, their average age being only 46; while not one of this class reached the general average, 56 years; their age, in 1880, averaging only 48 years. Some of the workers in this class, such as Telegraph Operators, Salesmen, Clerks and Book-keepers, always, according to the returns, have low life averages, and they, therefore, affect the other occupations in the class, whose average life is large. The class of Professional Men shows a larger average length of life than any other class (except Farmers), it being 58 years. The three professions, Law, Divinity and Medicine are included in this class; their average age being 53 years. Clergymen, as usual, rank the highest in length of life, their average being 61 years; Physicians rank next, viz. 50 years; while Lawyers are the lowest, being 47. Public Officials have not been, apparently, so long-lived in 1881 as in 1880; this year, their average age is 57 years, but, last year, it was 63, being a decrease of 6 years in their average length of life. Teachers also exhibit a falling off; in 1880, they averaged 44, this year, only 40 years. Gentlemen, that is, those who do not have to earn their own livelihood, show the highest average of all the callings assigned to those who have died in 1881; their average age is 70 years, or three years in advance of 1880. It would, however, be much more satisfactory, if those who make the returns of the deaths of these Gentlemen, would state the occupations which these persons had followed in the previous part of their lives. Artists have the lowest average in the class, it being 31 years; but, why this should be, is not easy to determine; their occupation is not supposed to be unhealthy; but, as only five of them died this year; no just conclusion as to their average duration of life can be formed. In the class "other employments," we find that Soldiers and Pensioners have lived, on an average, the allotted term of human life, viz.: 70 years. The largest number of these Pensioners was from the British army, and they have been generally advanced in life before becoming Pensioners; and, as we have no returns of Soldiers, who died in early life, it would be erroneous to conclude that the average life of a Soldier is 70 years. Correctly speaking, we have no Soldiers in Ontario. Volunteers are seldom returned as such on the Schedule; their calling, as civilians, being the one generally given in the return of their deaths. The last class, "Females," like several other classes, returns a lower average age than in 1880; the length of life, this year, for them, is only 38 years, while last year it was 41. Milliners and Dressmakers have the lowest duration of life, it being 31 years.

TABLE 28.

Deaths by Occupations.—Causes of Death.

Ten Highest Causes of Death amongst those whose Occupations are given.

—	1880.		—	1881.	
	No.	Per cent. of Death from all causes.		No.	Per cent. of Deaths from all causes.
Old Age	811	16.2	Old Age	913	16.3
Phthisis	769	15.4	sis	831	14.8
Pneumonia	350	7.0	Heart Disease	397	7.1
Paralysis and Appoplexy	312	6.2	Paralysis and Apoplexy	343	6.1
Heart Disease	306	6.0	Lung Disease	286	5.1
Accident	221	4.4	Fevers	263	4.7
Dropsy	168	3.3	Pneumonia	233	4.1
Fevers	156	3.1	Accident	221	3.9
Cancer	109	2.1	Dropsy	162	2.9
			Cancer	135	2.4

Ten Occupations which returned the largest number of Deaths from Phthisis.

OCCUPATIONS.	1880.			OCCUPATIONS.	1881.		
	Deaths from all causes.	Deaths from phthisis.	Rate per cent.		Deaths from all causes.	Deaths from phthisis.	Rate per cent.
Farmers	2373	296	12.4	Farmers	2519	308	12.2
Labourers	719	113	15.7	Labourers	771	134	17.3
Carpenters	165	36	21.8	Carpenters	159	31	19.4
Merchants	111	27	24.3	Merchants	143	24	16.7
Shoemakers	88	18	20.4	Servants	90	24	26.6
Servants	54	18	33.3	Teachers	68	22	32.3
Other Mechanics	57	16	28.0	Shoemakers	93	16	17.2
Teachers	48	14	29.1	Tavern-keepers	63	15	23.8
Tavern-keepers	53	13	24.5	Gentlemen	226	14	6.1
Salesmen and Clerks	36	13	36.1	Blacksmiths	82	13	15.8

CAUSES OF DEATH OF THOSE WHOSE OCCUPATIONS ARE GIVEN.

(For Table, see Appendix, page clxxiv.)

(*Also, Table 28.*)

The total number of deaths in this class are more this year, hence the number of deaths from each disease will be correspondingly larger. This is shown, by the returns, to be the case; but the percentage of these deaths to the whole number must be compared, in order to form a correct conclusion as to whether the mortality from these diseases is increasing or not.

There is an increase of 102 deaths from Old Age, but an increase of only .1 in the percentage. Of the 2,519 Farmers, whose deaths are recorded, 554, or 22 per cent. died from old age. It may here be noted that the diseases most fatal to Farmers are, Phthisis, Heart Disease, Apoplexy, Paralysis and Lung Disease. These diseases and Old Age carried off 1,429, or 56 per cent. of all the Farmers who have died this year.

In the total deaths of all whose occupations are given, it is found that nearly as many die from Consumption as from Old Age—831, or 14.8 per cent. of all the deaths from the former disease, and 913, or 16 per cent., from the latter.

This number of deaths from Phthisis, is a larger total number than in 1880, but the percentage is .6 smaller. Of the 831, who died from this disease, 308 of them, were Farmers, or 12.2 per cent. of all their deaths. This percentage is small when compared with those of other occupations such as Teachers, whose deaths numbered 68, and of those 22 or 32 per cent. died from Phthisis. Of the ten occupations which have returned the largest number of deaths from Consumption, it will be found that (with the exception of Gentlemen, of whom, only 6 per cent. died of this disease) they all have a higher rate per cent. from Consumption than Farmers; Servants and Tavern keepers have also very high death rates from Consumption, 26 and 23 per cent. respectively. Heart Disease and Apoplexy together, carried off the large number of 740, or 13 per cent. of the deaths from all causes. They have been particularly fatal to Farmers and Labourers' no less than 393, or 53 per cent. of them dying from these diseases. Probably many of the Farmers and Labourers registered as dying from Old Age, died from one or other of these diseases, as those who died from them were persons advanced in life. Cancer caused the death of 135, or 2.4 per cent., against 109 or 2.1 per cent. last year, this being an increase of 26, or .3 per cent. Farmers and Labourers together make up 73 of these deaths, or 53 per cent. of the whole number. There is a large decrease in the return of deaths from Pneumonia, but there is a corresponding increase in the deaths from Lung Disease, which disease was not in the list last year. In 1880, 350 deaths were from Pneumonia and 138 from Lung Disease, being a total of 488, or 9.8 per cent. of the deaths from all causes. The deaths of Farmers from these two diseases amount to 238, or 9 per cent.; while the mortality amongst Merchants, from the same diseases, is 17, or 12 per cent. Bakers, Confectioners and Labourers, make up 10 per cent. The number of accidental deaths is exactly the same as last year, being 221; but, the percentage to all the deaths is less by .5 per cent. Dropsy has decreased from 168, or 3.5 per cent., to 162, or 2.9 per cent.

Amongst the return of deaths for the year 1880 no less than twenty-nine persons were returned as having reached the age of 100 years or more. Inquiries were instituted by the Department to verify the ages of these deceased persons, the result being that no reliable information could be obtained as to the fact of any one of them having attained the ages mentioned.

The amendment to the Registration Act, which came into operation on the first day of January last, requires the Assessors of each Municipality, when making their annual Assessment, to inquire of each householder whether there had been a birth or death in the family during the previous year that had not been registered, if so, the Assessor must report the fact to the Division Registrar of the Division within which such birth or death happened. This amendment doubtless will be the means of causing a very large increase in the number of Birth and Death registrations over any previous year.

I have the honour to be, Sir,

Your obedient servant,

H. S. CREWE,

Inspector.

APPENDIX.

BIRTHS.

TABLE A.—BIRTHS BY MONTHS, 1881.

COUNTIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	No. of pairs of twins.	Triplets.	Illegitimate	Still Born.
Algoma and Thunder Bay :																	
Males	10	15	14	15	22	9	17	8	15	18	12	10	165	.....	.....	2	2
Females	12	10	21	20	13	13	18	13	10	18	7	14	169	.....	.....	.....	3
Total	22	25	35	35	35	22	35	21	25	36	19	24	334	1	....	2	5
Brant :																	
Males	29	30	45	34	27	40	23	35	37	31	29	33	393	.....	.....	2	2
Females	31	29	24	22	25	24	26	26	35	23	25	20	310	.....	.....	1	3
Total	60	59	69	56	52	64	49	61	72	54	54	53	703	5	.....	3	5
Bruce :																	
Males	57	69	63	69	52	59	53	62	61	45	50	61	701	.....	.....	6	7
Females	63	63	52	61	63	50	58	56	60	54	61	51	692	.....	.....	3	1
Total	120	132	115	130	115	109	111	118	121	99	111	112	1393	16	.....	9	8
Carleton :																	
Males	67	61	67	76	62	59	47	53	43	50	38	54	677	.....	.....	74	.....
Females	54	48	51	58	45	51	61	45	37	52	31	58	591	.....	.....	70	.....
Total	121	109	118	134	107	110	108	98	80	102	69	112	1268	11	.....	144	.....
Dufferin :																	
Males	24	26	25	25	14	18	21	28	17	22	12	15	247	.....	.....	1	5
Females	25	19	18	25	24	25	23	24	11	22	25	9	250	.....	.....	1	2
Total	49	45	43	50	38	43	44	52	28	44	37	24	497	3	.....	2	7
Elgin :																	
Males	36	34	27	35	24	23	38	45	33	22	28	27	372	.....	.....	.....	1
Females	33	27	23	30	29	25	28	31	30	36	27	23	342	.....	.....	1	1
Total	69	61	50	65	53	48	66	76	63	58	55	50	714	4	....	1	2

Essex :																	
Males	61	49	65	60	49	56	77	73	66	49	54	56	715	.....	.....	1	8
Females	64	48	66	59	57	42	52	69	44	57	42	48	648	.....	.....	3	6
Total	125	97	131	119	106	98	129	142	110	106	96	104	1363	16	....	4	14
Frontenac :																	
Males	46	49	38	39	37	30	35	46	24	38	37	35	454	.....	.....	14	3
Females	31	37	41	36	38	37	39	38	27	38	34	36	432	.....	.....	16	4
Total	77	86	79	75	75	67	74	84	51	76	71	71	886	14	.....	30	7
Grey :																	
Males	52	54	51	51	53	55	70	55	51	49	42	52	635	.....	.....	4	5
Females	65	51	51	53	44	51	43	45	44	48	47	54	596	.....	.....	12	5
Total	117	105	102	104	97	106	113	100	95	97	89	106	1231	13	.....	16	10
Haldimand :																	
Males	27	18	29	31	20	22	16	29	24	20	25	19	280	.....	.....	3	6
Females	28	18	17	20	21	14	20	24	17	20	20	23	242	.....	.....	5	3
Total	55	36	46	51	41	36	36	53	41	40	45	42	522	5	.....	8	9
Halton :																	
Males	28	16	18	22	14	21	21	20	24	25	17	21	247	.....	.....	1	1
Females	17	26	27	19	10	18	26	24	21	14	18	17	237	.....	.....	2	1
Total	45	42	45	41	24	39	47	44	45	39	35	38	484	1	.....	3	2
Hastings :																	
Males	60	44	44	34	39	31	37	46	29	48	33	37	482	.....	.....	5	7
Females	45	38	32	44	36	42	40	32	29	34	36	32	440	.....	.....	4	9
Total	105	82	76	78	75	73	77	78	58	82	69	69	922	6	.....	9	16
Huron :																	
Males	63	77	97	58	74	82	83	78	87	85	64	68	916	.....	.....	5	5
Females	65	67	84	52	66	53	69	73	85	64	64	62	804	.....	.....	5	5
Total	128	144	181	110	140	135	152	151	172	149	128	130	1720	18	1	10	10
Kent :																	
Males	57	45	44	44	35	35	52	43	33	33	39	39	499	.....	.....	3	.....
Females	54	33	50	40	44	42	31	39	32	27	35	55	482	.....	.....	2	2
Total	111	78	94	84	79	77	83	82	65	60	74	94	981	14	.....	5	2

TABLE A.—BIRTHS BY MONTHS, 1881.—*Continued.*

COUNTIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	No. of pairs of twins.	Triplets.	Illegitimate.	Still Born.
Lambton :																	
Males	52	51	58	42	42	38	38	46	53	34	41	57	552	....	.....	.....	2
Females	46	38	48	35	28	36	35	31	46	49	33	40	465	.....	.....	3	5
Total	98	89	106	77	70	74	73	77	99	83	74	97	1017	3	.....	3	7
Lanark :																	
Males	21	12	18	14	21	19	21	20	15	16	23	18	218	.....	.....	3	1
Females	26	19	29	17	24	17	16	10	30	13	17	22	240	.....	.....	4	1
Total	47	31	47	31	45	36	37	30	45	29	40	40	458	2	1	7	2
Leeds and Grenville :																	
Males	30	39	53	42	31	34	28	36	37	35	24	40	429	.....	.....	4	1
Females	36	36	49	37	27	42	26	46	45	54	38	37	473	.....	.....	5	1
Total	66	75	102	79	58	76	54	82	82	89	62	77	902	5	.....	9	2
Lennox and Addington :																	
Males	18	16	25	18	25	18	18	20	8	19	17	28	230	.....	.....	5	4
Females	13	21	24	19	19	20	20	16	14	15	13	24	218	.....	.....	.....	1
Total	31	37	49	37	44	38	38	36	22	34	30	52	448	6	.....	5	5
Lincoln :																	
Males	39	38	21	36	30	20	23	27	28	19	23	33	337	.....	....	2	2
Females	20	24	30	24	36	27	34	23	35	20	24	26	323	.....	.....	3	....
Total	59	62	51	60	66	47	57	50	63	39	47	59	660	9	.....	5	2
Middlesex :																	
Males	95	81	88	66	80	59	82	97	87	89	61	73	958	.....	.....	15	6
Females	69	89	93	76	74	74	82	84	71	66	84	89	951	.....	.....	20	11
Total	164	170	181	142	154	133	164	181	158	155	145	162	1909	15	.....	35	17

Muskoka and Parry Sound :																	
Males	30	35	39	34	35	33	27	34	25	26	24	16	358	.....	.....	6	2
Females	27	32	42	47	35	32	27	36	20	28	20	33	379	.....	.....	2	3
Total	57	67	81	81	70	65	54	70	45	54	44	49	737	7	.....	8	5
Norfolk':																	
Males	31	37	50	32	45	32	42	26	27	41	28	24	415	.....	.....	12	2
Females	18	26	28	24	36	16	32	34	31	28	21	24	318	.....	.....	3	.....
Total	49	63	78	56	81	48	74	60	58	69	49	48	733	11	.....	15	2
Northumberland and Durham :																	
Males	66	55	62	54	49	48	50	56	62	61	48	36	647	.....	.....	3	1
Females	43	52	56	28	42	43	33	44	62	43	44	59	549	.....	.....	4	.....
Total	109	107	118	82	91	91	83	100	124	104	92	95	1196	5	.....	7	1
Ontario :																	
Males	37	54	66	64	64	42	44	51	51	57	60	41	631	.....	.....	6	3
Females	48	50	53	54	42	56	45	50	49	42	48	37	574	.....	.....	4	2
Total	85	104	119	118	106	98	89	101	100	99	108	78	1205	11	.....	10	5
Oxford :																	
Males	46	53	56	50	63	46	48	59	55	50	50	42	618	.....	.....	12	3
Females	42	40	56	45	43	39	45	31	41	43	41	34	500	.....	.....	4	1
Total	88	93	112	95	106	85	93	90	96	93	91	76	1118	7	.....	16	4
Peel :																	
Males	33	23	29	23	27	27	18	21	18	29	20	26	294	.....	.....	3	1
Females	22	26	26	23	22	18	23	19	25	24	21	21	270	.....	.....	.....	.....
Total	55	49	55	46	49	45	41	40	43	53	41	47	564	2	.....	3	1
Perth :																	
Males	53	49	50	45	44	39	39	57	48	45	39	47	555	.....	.....	3	4
Females	52	46	54	29	57	50	41	46	42	46	38	51	552	.....	.....	3	2
Total	105	95	104	74	101	89	80	103	90	91	77	98	1107	8	.....	6	6
Peterborough :																	
Males	35	43	49	36	36	31	56	36	28	32	28	34	444	.....	.....	1	2
Females	29	31	31	36	40	35	42	34	31	38	39	27	413	.....	.....	4	1
Total	64	74	80	72	76	66	98	70	59	70	67	61	857	11	.....	5	3

TABLE A.—BIRTHS BY MONTHS, 1881—*Continued.*

COUNTIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	No. of pairs of twins.	Triplets.	Illegitimate.	Still Born.
Prescott and Russell :																	
Males	53	49	67	60	64	35	37	42	44	28	34	52	565	.....	.....	1	...
Females	47	38	59	53	52	40	43	42	39	28	37	50	528	....	....	2	....
Total	100	87	126	113	116	75	80	84	83	56	71	102	1093	6	.....	3	.....
Prince Edward :																	
Males	13	10	8	21	24	21	22	23	22	11	16	16	207	.....	.....	.....	1
Females	16	12	12	24	18	22	15	21	16	16	15	15	202	.....	.....	.....	2
Total	29	22	20	45	42	43	37	44	38	27	31	31	409	4	.....	.....	3
Renfrew :																	
Males	43	39	46	38	35	34	37	25	30	29	21	37	414	.....	.....	9	4
Females	35	42	39	30	36	26	20	19	30	35	18	31	361	.....	.....	9	1
Total	78	81	85	68	71	60	57	44	60	64	39	68	775	4	.....	18	5
Simcoe :																	
Males	59	72	84	53	56	46	51	63	54	50	69	59	716	.....	.....	3	3
Females	62	58	59	50	57	54	55	49	58	50	50	75	677	.....	.....	5	3
Total	121	130	143	103	113	100	106	112	112	100	119	134	1393	17	.....	8	6
Stormont, Dundas and Glengarry :																	
Males	47	41	54	47	36	41	32	33	40	45	38	42	496	....	.....	5	1
Females	39	38	44	35	36	40	33	52	36	35	38	55	481	.....	....	6	1
Total	86	79	98	82	72	81	65	85	76	80	76	97	977	20	.....	11	2
Victoria :																	
Males	42	34	42	32	35	33	29	28	34	32	36	33	410	.....	.....	2	2
Females	26	45	38	24	25	39	30	29	30	21	20	24	351	.....	.....	3	3
Total	68	79	80	56	60	72	59	57	64	53	56	57	761	6	.....	5	5

Waterloo :																	
Males	56	35	51	50	55	49	54	54	50	48	44	51	597	.....	.....	8	3
Females	40	44	64	54	46	42	50	47	40	50	43	63	583	.....	.....	6	2
Total	96	79	115	104	101	91	104	101	90	98	87	114	1180	10	.....	14	5
Welland :																	
Males	33	29	39	23	28	25	34	30	32	31	33	28	365	.....	.....	1	3
Females	31	19	29	37	29	31	26	39	23	26	25	38	353	.....	.....	1	1
Total	64	48	68	60	57	56	60	69	55	57	58	66	718	11	1	2	4
Wellington :																	
Males	66	60	66	58	73	53	64	52	69	55	58	80	754	.....	.....	6	1
Females	53	63	80	58	60	47	58	66	74	53	61	69	742	.....	.....	5	3
Total	119	123	146	116	133	100	122	118	143	108	119	149	1496	19	.....	11	4
Wentworth :																	
Males	69	80	75	70	60	55	84	69	67	81	81	85	876	.....	.....	30	13
Females	60	64	79	83	63	60	80	56	73	61	65	62	806	.....	.....	25	18
Total	129	144	154	153	123	115	164	125	140	142	146	147	1682	14	.....	55	31
York :																	
Males	201	161	181	158	183	169	186	193	200	190	186	270	2278	.....	.....	68	20
Females	187	177	176	151	161	136	185	146	163	171	167	203	2023	.....	.....	73	16
Total	388	338	357	309	344	305	371	339	363	361	353	473	4301	44	.....	141	36
Total Males	1885	1783	2004	1759	1763	1587	1754	1819	1728	1688	1582	1795	21147	384	2	329	137
Total Females	1674	1644	1855	1632	1623	1529	1630	1609	1606	1562	1492	1711	19567			419	123
Grand Total	3559	3427	3859	3391	3386	3116	3384	3428	3334	3250	3074	3506	40714	384	2	748	260

BIRTHS BY MONTHS IN THE TEN CITIES DURING 1881.

CITIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	No. of Pairs of Twins.	Triplets.	Illegitimate.	Still Born.
Toronto :																	
Males	128	102	111	91	117	102	113	128	119	112	121	200	1444	....	....	66	15
Females	107	109	129	88	99	86	115	84	98	111	100	156	1282	...	....	72	16
Total	235	211	240	179	216	188	228	212	217	223	221	356	2726	33	..	138	31
Hamilton :																	
Males	35	42	41	45	35	30	53	39	41	41	58	52	512	....	....	23	10
Females	36	33	48	43	39	34	42	30	43	33	33	31	445	....	....	23	14
Total	71	75	89	88	74	64	95	69	84	74	91	83	957	6	....	46	24
Ottawa :																	
Males	30	26	30	25	22	19	26	25	14	16	12	24	269	....	....	4	...
Females	20	23	17	18	19	17	26	20	14	15	10	27	226	....	....	4	...
Total	50	49	47	43	41	36	52	45	28	31	22	51	495	2	...	8	....
London :																	
Males	21	22	19	12	16	14	24	18	21	19	12	16	214	..	....	12	1
Females	11	14	22	16	21	23	17	21	14	12	17	24	212	....		14	1
Total	32	36	41	28	37	37	41	39	35	31	29	40	426	2	..	26	2
Kingston :																	
Males	25	25	16	10	12	18	11	21	13	14	14	13	192	....	....	9	1
Females	13	17	13	14	14	15	13	16	9	15	15	17	171	...	....	16	1
Total	38	42	29	24	26	33	24	37	22	29	29	30	363	2	....	25	2
St. Catharines :																	
Males	9	12	5	6	9	3	5	9	9	7	8	9	91	....	....	...	...
Females	1	9	7	3	11	7	6	6	12	4	7	8	81	....	...	....	....
Total	10	21	12	9	20	10	11	15	21	11	15	17	172	2	....	....	....
Belleville :																	
Males	10	8	13	9	7	9	5	12	13	13	7	6	112	....	....	....	1
Females	7	11	6	12	6	8	12	5	5	9	14	3	98	....	....	4	1
Total	17	19	19	21	13	17	17	17	18	22	21	9	210	1	....	4	2
Brantford :																	
Males	9	13	10	11	8	19	10	14	11	11	11	9	136	....	...	....	....
Females	14	10	9	10	8	8	10	12	12	6	7	5	111	....	....	....	1
Total	23	23	19	21	16	27	20	26	23	17	18	14	247	1	....	...	1
Guelph :																	
Males	7	12	13	17	13	8	10	10	14	11	13	11	139	...	....	1	1
Females	5	19	17	13	8	6	14	14	15	8	14	10	143	....	....	1	1
Total	12	31	30	30	21	14	24	24	29	19	27	21	282	3	...	2	2
St. Thomas :																	
Males	17	11	7	9	5	3	13	15	7	2	6	13	108	....	....	....	....
Females	8	5	8	7	8	9	8	8	9	10	8	8	96	....	....	....	....
Total	25	16	15	16	13	12	21	23	16	12	14	21	204	1	....	....	....
Males	291	273	265	235	244	225	270	291	262	246	262	353	3217	....	...	115	29
Females	222	250	276	224	233	213	263	216	231	223	225	289	2865	....	....	134	35
Total	513	523	541	459	477	438	533	507	493	469	487	642	6082	53	...	249	64

MARRIAGES.

TABLE B.—MARRIAGES BY DENOMINATIONS.

The following Table shews the number of Marriages returned as having been solemnized during the year 1881, the religious denomination of the parties married, and whether by license or banns.

COUNTIES.	Religious Denomination of Bride and Bridegroom.													How Married.			
	Episcopalian.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Lutheran.	Quaker.	Mennonite.	Bible Christian.	Other Denominations.	Total.	No Denomination given.	Grand Total.	License.	Banns.	Not stated.	Total Marriages.
Algoma and Thunder Bay :																		
Males	19	21	30	14	3	.....	.....	.....	.....	.....	1	88	1	89	.....	.....	.....	.....
Females	17	20	29	13	6	.....	.....	.....	.....	.....	3	88	1	89	.....	.....	.....	.....
Total	36	41	59	27	9	.....	.....	.....	.....	.....	4	176	2	178	79	10	.....	89
Brant :																		
Males	26	44	93	17	38	9	1	.....	.....	1	7	236	1	237	.....	.....	.....	.....
Females	25	30	97	19	51	6	.....	.....	.....	.....	8	236	1	237	.....	.....	.....	.....
Total	51	74	190	36	89	15	1	.....	.....	1	15	472	2	474	221	16	.....	237
Bruce :																		
Males	54	148	97	45	16	4	17	.....	3	1	10	395	1	396	.....	.....	.....	.....
Females	45	143	106	50	19	1	17	.....	2	1	11	395	1	396	.....	.....	.....	.....
Total	99	291	203	95	35	5	34	.....	5	2	21	790	2	792	332	61	3	396
Carleton :																		
Males	116	61	47	201	7	1	2	.....	.....	.....	1	436	3	439	.....	.....	.....	.....
Females	127	60	41	201	6	1	2	.....	.....	.....	1	439	.....	439	.....	.....	.....	.....
Total	243	121	88	402	13	2	4	.....	.....	.....	2	875	3	878	295	136	8	439

Dufferin :																		
Males	41	37	58	....	.....	3	.....	.....	.....	.....	1	140	.....	140	.....	.....	.....	...
Females	29	39	67	2	2	.....	.....	.....	.....	.....	1	140	....	140	.....	.....	..	.....
Total	70	76	125	2	2	3	.....	.....	.....	.....	2	280	.....	280	139	1	.....	140
Elgin :																		
Males	44	50	135	22	65	3	1	....	1	5	4	330	5	335	....	.....	.....	.....
Females	23	53	150	25	60	3	1	....	1	2	9	327	8	335	.....	.....	....	.....
Total	67	103	285	47	125	6	2	.....	2	7	13	657	13	670	307	28	.....	335
Essex :																		
Males	47	22	106	156	35	1	2	1	.....	2	.....	372	3	375	.....	.....	.....	.....
Females	35	21	123	160	27	2	5	.....	.....	1	.....	374	1	375	.....	.....	.....	....
Total	82	43	229	316	62	3	7	1	.....	3	.....	746	4	750	246	126	3	375
Frontenac :																		
Males	65	40	111	51	5	4	.....	.....	.....	1	1	278	2	280	.....	.....	.....	.....
Females	54	40	122	47	3	8	.....	.....	.....	4	.....	278	2	280	.....	.....	.....	.....
Total	119	80	233	98	8	12	.....	.....	.....	5	1	556	4	560	240	40	.....	280
Grey :																		
Males	51	126	153	16	12	1	26	3	2	2	5	397	4	401	.....	.....	.....	.....
Females	44	124	160	14	20	2	25	2	1	1	7	400	1	401	.....	.....	.....	.....
Total	95	250	313	30	32	3	51	5	3	3	12	797	5	802	370	31	.....	401
Haldimand :																		
Males	31	32	62	9	16	.....	4	.....	4	.....	11	169	8	177	.....	.....	.....	....
Females	30	25	66	10	20	1	6	.....	4	.....	11	173	4	177	.....	.....	.....	.....
Total	61	57	128	19	36	1	10	.....	8	....	22	342	12	354	167	10	.....	177
Halton :																		
Males	29	42	57	3	3	2	.....	.....	..	.....	3	139	.....	139	....	....	.....	....
Females	21	37	62	7	8	1	..	.....	.....	.....	1	137	2	139	....	.....	.....	.....
Total	50	79	119	10	11	3	.....	.....	....	.....	4	276	2	278	139	.....	....	139

TABLE B.—MARRIAGES BY DENOMINATIONS, 1881—*Continued.*

COUNTIES.	Religious Denomination of Bride and Bridegroom.														How Married.			
	Episcopalian.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Lutheran.	Quaker.	Mennonite.	Bible Christian.	Other Denominations.	Total.	No Denomination given.	Grand Total.	License.	Banns.	Not stated.	Total Marriages.
Hastings :																		
Males	65	36	214	46	8	2	1	2	.....	5	4	383	6	389	...	.....	.....	...
Females	55	39	326	48	7	2	1	.....	.....	6	1	385	4	389	.....	.....	.....	...
Total	120	75	440	94	15	4	2	2	.....	11	5	768	10	778	355	34	.....	389
Huron :																		
Males	55	145	140	13	9	2	13	....	.....	53	2	432	3	435	.....	.....	.....	.....
Females	61	140	138	16	6	5	16	....	.....	48	2	432	3	435	...	.....	.....	.....
Total	116	285	278	29	15	7	29	.. ..	.....	101	4	864	6	870	419	14	2	435
Kent :																		
Males	58	68	182	29	38	2	2	....	1	2	3	385	10	395	.....	.....	.....	.....
Females	43	63	207	36	35	3	1	.....	.....	1	3	392	3	395	.....	.....	.....	...
Total	101	131	389	65	73	5	3	.....	1	3	6	777	13	790	377	16	2	395
Lambton :																		
Males	64	69	140	10	27	5	4	.....	2	1	4	326	3	329	..	.....	.....	...
Females	54	77	139	14	30	9	2	.....	1	.....	1	327	2	329	.....	.....	.....	...
Total	118	146	279	24	57	14	6	.....	3	1	5	653	5	658	312	14	3	329

Lanark :																		
Males	36	84	27	36	6	5					5	199		199				
Females	39	79	35	30	7	5					4	199		199				
Total	75	163	62	66	13	10					9	398		398	174	23	2	199
Leeds and Grenville :																		
Males	90	67	172	54	19	1	1		1	2	3	410	1	411				
Females	85	60	185	53	21	1	2				4	411		411				
Total	175	127	357	107	40	2	3		1	2	7	821	1	822	370	40	1	411
Lennox and Addington :																		
Males	28	22	158	20	1		1			1		231	1	232				
Females	30	16	161	21		1	1	1				231	1	232				
Total	58	38	319	41	1	1	2	1		1		462	2	464	214	18		232
Lincoln :																		
Males	47	32	79	7	11				5		7	188	4	192				
Females	39	35	83	6	19				3	1	3	189	3	192				
Total	86	67	162	13	30				8	1	10	377	7	384	189	3		192
Middlesex :																		
Males	151	132	236	43	52	6	4	1		19	2	646	5	651				
Females	129	124	256	48	61	10	3			13	2	646	5	651				
Total	280	256	492	91	113	16	7	1		32	4	1292	10	1302	620	28	3	651
Muskoka and Parry Sound :																		
Males	37	34	82	12	7		3			2	1	178	3	181				
Females	26	41	92	10	6		3			1		179	2	181				
Total	63	75	174	22	13		6			3	1	357	5	362	173	6	2	181
Norfolk :																		
Males	29	18	108	3	90	1	6	1		2	3	261	2	263				
Females	26	12	115	3	87	1	5			1	6	256	7	263				
Total	55	30	223	6	177	2	11	1		3	9	517	9	526	256	5	2	263

TABLE B.—MARRIAGES BY DENOMINATIONS, 1881– *Continued.*

COUNTIES.	Religious Denomination of Bride and Bridegroom.														How Married.			
	Episcopalian.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Lutheran.	Quaker.	Mennonite.	Bible Christian.	Other Denominations.	Total.	No Denomination given.	Grand Total.	License.	Banns.	Not stated.	Total Marriages.
Northumberland and Durham :																		
Males	106	83	205	20	13	3	3	.....	..	54	.....	487	3	490	.....	.....	.....	.....
Females	65	82	242	25	6	9	.....	.....	.....	55	3	487	3	490	.....	.....	.....	.....
Total	171	165	447	45	19	12	3	.....	.....	109	3	974	6	980	469	17	4	490
Ontario :																		
Males	44	57	131	36	14	.....	.....	.....	.....	26	1	309	12	321	.....	.....	.....	.....
Females	42	53	126	39	24	1	.....	1	1	24	.....	311	10	321	.....	.....	.....	.....
Total	86	110	257	75	38	1	.....	1	1	50	1	620	22	642	283	38	.....	321
Oxford :																		
Males	52	79	137	7	58	3	4	.....	4	17	13	374	8	382	.....	...	.....	...
Females	41	81	145	4	59	8	5	.....	4	12	16	375	7	382	.....	.....	.....	...
Total	93	160	282	11	117	11	9	.....	8	29	29	749	15	764	376	6	.....	382
Peel :																		
Males	25	44	58	13	8	1	.....	.....	.....	.....	4	153	3	156	.....	.....	.....	.....
Females	19	35	78	12	7	.....	.....	.....	.....	.....	2	153	3	156	.....	.....	.....	.....
Total	44	79	136	25	15	1	.....	.....	.....	.....	6	306	6	312	147	8	1	156

Perth :																		
Males	53	92	96	26	10	3	44	.....	3	9	5	341	4	345	.....	.....	.....	.....
Females	50	88	98	30	8	6	42	.....	3	9	6	340	5	345	..	.....	.....	.....
Total	103	180	194	56	18	9	86	.....	6	18	11	681	9	690	309	36	....	345
Peterborough :																		
Males	41	54	61	25	10	1	.....	....	...	18	.....	210	.....	210	.....	.....	.....	....
Females	38	52	77	24	8	.....	.....	.....	.....	10	.....	209	1	210	.....	.....	.....	.....
Total	79	106	138	49	18	1	.....	.....	.....	28	.....	419	1	420	189	21	....	210
Prescott and Russell :																		
Males	7	24	13	162	5	2	.....	.....	.....	1	.....	214	3	217	.....	.....	.....	.....
Females	4	29	11	162	7	.....	.....	....	.....	.....	.....	213	4	217	....	....	.....	.....
Total	11	53	24	324	12	2	.....	.....	.....	1	.....	427	7	434	67	150	.....	217
Prince Edward :																		
Males	29	6	100	2	.....	.....	.....	.....	....	2	6	145	5	150	.. ..	.....	.....	.....
Females	25	8	107	2	.....	.....	.....	.....	.....	.....	4	146	4	150	.....	.....	.....	.....
Total	54	14	207	4	.....	.....	.....	...	.....	2	10	291	9	300	150	.....	.....	150
Renfrew :																		
Males	40	60	37	98	6	.....	9	.....	.....	3	6	259	.....	259	....	.....	.....	.....
Females	44	57	33	102	9	.....	5	.....	... .	3	6	259	.....	259	...	.....	... ..	....
Total	84	117	70	200	15	....	14	.....	....	6	12	518	.....	518	171	88	.....	259
Simcoe :																		
Males	107	126	142	43	18	5	.....	.....	1	2	7	451	.....	451	.....	....	.....	...
Females	108	127	139	43	20	4	.....	.....	1	3	4	449	2	451	....	....	... ..	.....
Total	215	253	281	86	38	9	.....	... .	2	5	11	900	2	902	422	26	3	451
Stormont, Dundas and Glengarry :																		
Males	43	104	80	98	10	2	11	.....	.....	.....	... .	348	.....	348	.....	.....	.....	.....
Females	38	87	88	96	12	2	18	.....	.....	.....	2	343	5	348	.....	.....	.....	.....
Total	81	191	168	194	22	4	29	....	.....	.....	2	691	5	696	265	81	2	348

TABLE B.—MARRIAGES BY DENOMINATIONS, 1881—*Concluded.*

COUNTIES.	Religious Denomination of Bride and Bridegroom.														How Married.			
	Episcopalian.	Presbyterian.	Methodist.	Roman Catholic.	Baptist.	Congregationalist.	Lutheran.	Quaker.	Mennonite.	Bible Christian.	Other Denominations.	Total.	No Denomination given.	Grand Total.	License.	Banns.	Not stated.	Total Marriages.
Victoria:																		
Males	33	47	86	32	6	1	....	.....	.....	25	2	232	.....	232	.....	.....	.....	.....
Females	30	41	92	36	5	.....	....	.....	.....	27	...	231	1	232	.....	.....	....	.....
Total	63	88	178	68	11	1	.....	....	.....	52	2	463	1	464	210	20	2	232
Waterloo:																		
Males	18	54	51	64	7	1	100	....	41	....	27	363	7	370	.....	.....	.....	.....
Females	17	54	54	62	8	.....	97	.....	42	2	26	362	8	370	.....	.....	.....	.....
Total	35	108	105	126	15	1	197	.....	83	2	53	725	15	740	238	130	2	370
Welland:																		
Males	36	29	49	16	8	....	13	1	4	.....	15	171	5	176	...	...	.....	
Females	32	31	52	15	7	.....	15	.....	2	.....	17	171	5	176	.....	.....	.....	...
Total	68	60	101	31	15	.....	28	1	6	.....	32	342	10	352	153	23	.....	176
Wellington:																		
Males	59	136	153	62	23	6	2	.....	.....	8	12	461	1	462	.....	.....	.....	.....
Females	49	134	170	65	15	5	3	.....	.....	5	16	462	.....	462	.....	.....	.....	.....
Total	108	270	323	127	38	11	5	.....	.....	13	28	923	1	924	408	52	2	462

Males	139	119	201	76	21	4	7	.....	.....	4	4	575	13	588	.....	.....	.....	...
Females	128	112	209	87	22	2	4	.....	.....	5	6	575	13	588	.....	.....	.....	...
Total	267	231	410	163	43	6	11	....	.....	9	10	1150	26	1176	547	38	3	588
York :																		
Males	423	206	338	141	55	23	13	2	8	27	15	1251	13	1264	.....	.....	.....	...
Females	388	203	341	161	61	27	5	.....	7	31	18	1242	22	1264	.....	.....	.....	...
Total	811	409	679	302	116	50	18	2	15	58	33	2493	35	2528	1175	86	3	1264
Total Males	2438	2650	4425	1728	740	107	294	11	89	295	195	12963	143	13106	.....	.....	.....	.....
Total Females	2155	2572	4722	1798	779	126	284	4	72	266	204	12962	144	13106	.....	.....	.....	.....
Grand Total	4593	5202	9147	3526	1519	233	578	15	152	561	399	25925	287	26212	11573	1480	53	13106

TABLE C.

MARRIAGES BY MONTHS.

TABLE C.—MARRIAGES BY MONTHS, 1881.

COUNTIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	No date given.	Total number of couples married.
Algoma and Thunder Bay	6	10	9	1	3	9	6	6	13	12	9	4	1	89
Brant	19	14	18	30	23	21	17	6	16	25	24	24	.....	237
Bruce	39	28	34	23	33	32	19	26	22	47	48	43	2	396
Carleton	43	28	33	35	33	49	35	44	52	37	23	22	5	439
Dufferin	15	12	22	9	4	8	6	3	7	11	16	27	.....	140
Elgin	30	23	32	28	20	17	17	16	25	28	33	64	2	335
Essex	29	35	20	24	24	26	26	20	32	39	62	38	.....	375
Frontenac	27	17	24	20	15	21	20	23	22	31	31	28	1	280
Grey	43	39	58	30	33	26	8	17	23	39	30	52	3	401
Haldimand	13	16	21	14	10	11	2	12	10	23	19	26	.....	177
Halton	14	11	11	13	7	12	6	8	10	10	16	21	.....	139
Hastings	40	16	44	27	19	24	28	20	31	34	48	57	1	389
Huron	39	34	43	40	32	40	17	18	45	31	27	66	3	435
Kent	38	29	32	25	28	24	24	37	25	36	32	62	3	395
Lambton	25	27	27	15	27	28	19	17	30	38	42	34	.....	329
Lanark	14	6	22	16	15	16	12	20	22	13	23	20	.....	199
Leeds and Grenville	30	20	36	27	27	27	20	25	33	31	42	43	.....	411

Lennox and Addington	17	11	20	19	13	10	11	7	33	28	28	32	3	232
Lincoln	21	19	8	15	11	9	8	15	21	22	16	25	2	192
Middlesex	45	34	61	49	47	58	28	43	70	78	66	69	3	651
Muskoka and Parry Sound	18	13	22	12	12	13	11	18	20	12	9	19	2	181
Norfolk	30	22	25	13	21	19	11	15	27	26	23	30	1	263
Northumberland and Durham	40	40	41	33	36	41	25	22	35	50	48	77	2	490
Ontario	26	32	20	26	21	22	15	16	33	21	34	54	1	321
Oxford	25	34	44	31	25	21	17	18	31	36	47	52	1	382
Peel	10	16	21	7	6	13	11	7	16	16	11	22	.....	156
Perth	37	29	34	23	17	22	19	22	32	41	21	48	.....	345
Peterborough	21	18	29	12	15	17	7	6	12	25	22	25	1	210
Prescott and Russell	22	17	12	5	11	27	32	22	26	26	10	7	.....	217
Prince Edward	12	9	10	5	10	10	5	5	11	19	25	25	4	150
Renfrew	18	21	11	25	28	18	26	22	24	27	23	15	1	259
Simcoe	40	40	45	24	29	35	22	23	39	47	37	67	3	451
Stormont, Dundas and Glengarry	42	25	26	19	13	24	24	22	36	39	31	44	3	348
Victoria	23	24	22	27	8	18	13	8	16	22	24	27	.....	232
Waterloo	35	44	35	19	25	34	12	15	36	44	37	31	3	370
Welland	10	15	14	8	20	7	10	17	22	25	15	13	.....	176
Wellington	57	54	55	38	26	23	20	30	31	36	37	54	1	462
Wentworth	53	35	29	41	53	45	31	48	49	61	56	86	1	588
York	100	87	99	80	102	123	82	82	137	128	105	135	4	1264
Total	1165	1023	1169	918	902	1010	724	801	1180	1314	1250	1593	57	13106

TABLE D.—MARRIAGES BY AGES, 1881.

COUNTIES.	Under 20.	20 and under 25.	25 and under 30.	30 and under 35.	35 and under 40.	40 and under 45.	45 and under 50.	50 and under 55.	55 and under 60.	60 and under 65.	65 and under 70.	70 and under 75.	75 and under 80.	Over 80.	Ages not given.	Total.	Bachelors.	Widowers.	Total.	Spinsters.	Widows.	Total.
Algoma and Thunder Bay :																						
Males	2	38	28	10	5	3	....	1	1	....	....	....	....	....	1	89						
Females	34	42	8	2	....	1	1	....	....	....	....	....	....	....	1	89						
Total	36	80	36	12	5	4	1	1	1	....	....	....	....	....	2	178	81	8	89	84	5	89
Brant :																						
Males	4	96	76	26	8	11	3	8	2	2	1	....	....	....	....	237						
Females	44	126	36	13	8	5	2	2	1	....	....	....	....	....	....	237						
Total	48	222	112	39	16	16	5	10	3	2	1	....	....	....	....	474	209	28	237	232	15	237
Bruce :																						
Males	3	144	156	38	19	12	10	6	4	1	2	....	1	....	....	396						
Females	77	231	61	11	5	3	3	1	3	....	1	....	....	....	....	396						
Total	80	375	217	49	24	15	13	7	7	1	3	....	1	....	....	792	358	38	396	380	16	396
Carleton :																						
Males	12	142	141	76	31	10	8	6	4	1	1	1	....	....	6	439						
Females	98	200	85	32	10	3	3	....	....	1	....	....	....	....	7	439						
Total	110	342	226	108	41	13	11	6	4	2	1	1	....	....	13	878	388	51	439	416	23	439
Dufferin :																						
Males	1	56	50	15	6	5	....	2	....	1	2	....	....	....	2	140						
Females	32	72	24	4	1	3	....	....	3	....	....	....	....	....	1	140						
Total	33	128	74	19	7	8	....	2	3	1	2	....	....	....	3	280	127	13	140	132	8	140
Elgin :																						
Males	3	108	121	55	16	12	3	2	2	2	3	2	....	....	3	335						
Females	90	146	60	23	9	....	1	2	1	....	....	1	....	....	2	335						
Total	93	254	184	78	25	12	4	4	3	2	3	3	....	....	5	670	301	34	335	318	17	335

Essex :																						
Males	9	157	106	58	12	9	8	6	3	2	...	1	1	....	3	375						
Females	126	152	48	24	7	6	4	4	2	....	....	..	....	....	2	375						
Total	135	309	154	82	19	15	12	10	5	2	....	1	1	....	5	750	332	43	375	359	36	375
Frontenac :																						
Males	1	102	104	42	12	7	5	1	2	1	1	1	....	....	1	280						
Females	52	150	50	15	4	2	2	2	....	....	1	....	....	....	2	280						
Total	53	252	154	57	16	9	7	3	2	1	2	1	....	....	3	560	259	21	280	267	13	280
Grey :																						
Males	3	121	172	60	20	11	4	2	3	....	1	1	1	1	1	401						
Females	98	217	65	14	1	2	2	....	1	1	....	....	....	....	....	401						
Total	101	338	237	74	21	13	6	2	4	1	1	1	1	1	1	802	362	39	401	389	12	401
Haldimand :																						
Males	3	62	66	25	12	3	2	...	2	....	1	....	1	....	....	177						
Females	47	81	30	10	6	1	1	....	...	....	....	1	....	....	....	177						
Total	50	143	96	35	18	4	3	....	2	....	1	1	1	....	....	354	162	15	177	169	8	177
Halton :																						
Males	1	38	43	32	19	3	1	....	1	1	....	....	....	....	....	139						
Females	20	68	36	7	4	2	1	....	....	....	....	....	....	....	1	139						
Total	21	106	79	39	23	5	2	....	1	1	....	....	....	....	1	278	128	11	139	136	3	139
Hastings :																						
Males	7	151	122	38	25	14	9	7	4	5	2	....	1	....	4	389						
Females	101	177	51	23	14	5	6	5	....	2	....	1	....	....	4	389						
Total	108	328	173	61	39	19	15	12	4	7	2	1	1	....	8	778	325	64	389	363	26	389
Huron :																						
Males	2	146	159	65	34	6	7	6	4	2	2	2	....	....	....	435						
Females	82	242	64	22	13	3	4	2	1	1	1	....	....	....	....	435						
Total	84	388	223	87	47	9	11	8	5	3	3	2	....	....	....	870	398	37	435	415	20	435
Kent :																						
Males	3	162	133	47	20	13	5	2	1	4	2	1	1	....	1	395						
Females	103	197	59	12	9	2	4	1	2	2	....	2	....	....	2	395						
Total	106	359	192	59	29	15	9	3	3	6	2	3	1	....	3	790	355	40	395	370	25	395

TABLE D.—MARRIAGES BY AGES, 1881—*Continued.*

COUNTIES.	Under 20.	20 and under 25.	25 and under 30.	30 and under 35.	35 and under 40.	40 and under 45.	45 and under 50.	50 and under 55.	55 and under 60.	60 and under 65.	65 and under 70.	70 and under 75.	75 and under 80.	Over 80.	Ages not given.	Total.	Bachelors.	Widowers.	Total.	Spinsters.	Widows.	Total.
Lambton :																						
Males	2	124	125	39	17	5	7	3	2	2	2	...	1	...	...	329						
Females	74	183	45	8	8	5	3	...	1	...	...	...	...	...	2	329						
Total	76	307	170	47	25	10	10	3	3	2	2	...	1	...	2	658	307	22	329	318	11	329
Lanark :																						
Males	2	58	81	27	21	5	3	1	...	...	1	...	...	...	...	199						
Females	23	117	38	8	8	4	...	...	...	...	1	...	...	...	...	199						
Total	25	175	119	35	29	9	3	1	...	...	2	...	...	...	...	398	183	16	199	196	3	199
Leeds and Grenville :																						
Males	9	132	137	58	24	8	14	12	9	3	1	3	1	...	...	411						
Females	65	206	84	20	13	13	7	2	1	...	...	...	...	...	...	411						
Total	74	338	221	78	37	21	21	14	10	3	1	3	1	...	...	822	344	67	411	385	26	411
Lennox and Addington :																						
Males	7	79	81	28	17	8	2	2	4	...	...	1	1	...	2	232						
Females	61	105	41	13	1	4	1	2	...	...	1	...	...	...	3	232						
Total	68	184	122	41	18	12	3	4	4	...	1	1	1	...	5	464	208	24	232	221	11	232
Lincoln :																						
Males	2	68	61	26	18	8	4	2	1	1	...	...	1	...	...	192						
Females	45	92	28	13	6	3	1	3	...	1	...	...	...	...	...	192						
Total	47	160	89	39	24	11	5	5	1	2	...	...	1	...	...	384	170	22	192	182	10	192
Middlesex :																						
Males	4	231	209	85	46	22	22	8	12	5	2	2	...	...	...	651						
Females	103	322	125	41	24	18	10	4	1	3	...	...	...	...	...	651						
Total	107	556	334	126	70	40	32	12	13	8	2	2	...	...	...	1302	560	91	651	599	52	651

Muskoka and Parry Sound :																						
Males	2	66	66	27	12	3	....	3	....	....	1	....	....	....	1	181						
Females	63	90	17	6	1	3	....	....	....	....	....	....	....	....	1	181						
Total	65	156	83	33	13	6	....	3	....	....	1	....	....	....	2	362	168	13	181	171	10	181
Norfolk :																						
Males	3	116	71	38	7	8	7	3	4	3	1	1	....	....	1	263						
Females	75	117	40	13	2	5	3	3	5	....	....	....	....	....	....	263						
Total	78	233	111	51	9	13	10	6	9	3	1	1	....	....	1	526	228	35	263	242	21	263
Northumberland and Durham :																						
Males	2	194	158	71	27	12	5	5	5	5	3	1	1	....	1	490						
Females	81	274	84	22	6	9	2	4	3	4	....	....	....	....	1	499						
Total	83	468	242	93	33	21	7	9	8	9	3	1	1	....	2	980	432	58	490	453	37	490
Ontario :																						
Males	5	125	108	40	23	8	4	2	3	2	1	....	....	....	....	321						
Females	70	152	58	28	4	2	....	4	2	....	....	....	....	....	1	321						
Total	75	277	166	68	27	10	4	6	5	2	1	....	....	....	1	642	285	36	321	310	11	321
Oxford :																						
Males	3	155	135	43	16	8	7	7	3	2	1	1	....	....	1	382						
Females	84	184	74	16	8	8	4	1	1	1	....	....	....	....	1	382						
Total	87	339	209	59	24	16	11	8	4	3	1	1	....	....	2	764	339	43	382	361	21	382
Peel :																						
Males	1	42	62	24	11	2	5	1	5	2	...	1	....	....	....	156						
Females	22	73	38	9	4	4	2	1	2	1	....	....	....	....	....	156						
Total	23	115	100	33	15	6	7	2	7	3	....	1	....	....	....	312	134	22	156	143	13	156
Perth :																						
Males	....	129	135	47	17	5	4	2	....	2	1	2	....	....	1	345						
Females	48	205	72	6	5	2	1	3	2	1	....	....	....	....	....	345						
Total	48	334	207	53	22	7	5	5	2	3	1	2	....	....	1	690	313	32	345	330	15	345
Peterborough :																						
Males	2	66	88	31	9	8	4	1	....	1	....	....	....	....	....	210						
Females	40	108	45	7	4	2	2	1	....	1	....	....	....	....	....	210						
Total	42	174	133	38	13	10	6	2	....	2	....	....	....	....	....	420	198	12	210	200	10	210

TABLE D.—MARRIAGES BY AGES, 1881—*Concluded.*

COUNTIES.	Under 20.	20 and under 25.	25 and under 30.	30 and under 35.	35 and under 40.	40 and under 45.	45 and under 50.	50 and under 55.	55 and under 60.	60 and under 65.	65 and under 70.	70 and under 75.	75 and under 80.	Over 80.	Ages not given.	Total.	Bachelors.	Widowers.	Total.	Spinsters.	Widows.	Total.
Prescott and Russell :																						
Males	8	87	63	19	22	6	3	2	....	2	2	1	1	....	1	217						
Females	69	96	28	7	7	4	2	....	2	....	....	....	....	....	2	217						
Total	77	183	91	26	29	10	5	2	2	2	2	1	1	....	3	434	190	27	217	207	10	217
Prince Edward :																						
Males	4	81	39	12	6	3	....	2	1	....	....	1	1	....	....	150						
Females	52	65	17	7	4	1	1	1	....	1	1	....	....	....	....	150						
Total	56	146	56	19	10	4	1	3	1	1	1	1	1	....	....	300	137	13	150	140	10	150
Renfrew :																						
Males	1	85	103	30	16	8	7	2	3	2	....	2	....	....	....	259						
Females	60	127	45	17	3	2	3	2	....	....	....	....	....	....	....	259						
Total	61	212	148	47	19	10	10	4	3	2	....	2	....	....	....	518	238	21	259	249	10	259
Simcoe :																						
Males	2	159	175	57	28	13	7	4	1	4	1	....	....	....	....	451						
Females	125	216	67	18	11	4	3	4	....	3	....	....	....	....	....	451						
Total	127	375	242	75	39	17	10	8	1	7	1	....	....	....	....	902	410	41	451	427	24	451
Stormont, Dundas and Glengarry :																						
Males	9	119	104	60	18	15	8	6	2	1	1	....	1	....	4	348						
Females	68	174	48	30	13	5	3	....	....	....	....	....	1	....	6	348						
Total	77	293	152	90	31	20	11	6	2	1	1	....	2	....	10	696	305	43	348	338	10	348
Victoria :																						
Males	4	86	90	25	16	5	2	1	....	2	....	1	....	....	....	232						
Females	54	126	33	8	4	3	2	....	....	2	....	....	....	....	....	232						
Total	58	212	123	33	20	8	4	1	....	4	....	1	....	....	....	464	209	23	232	220	12	232

Waterloo :																						
Males	2	174	129	27	11	12	6	1	2	3	....	1	1	...	1	370						
Females	64	210	66	14	5	5	3	1	....	1	1	...	....	....	....	370						
Total	66	384	195	41	16	17	9	2	2	4	1	1	1	....	1	740	336	34	370	351	19	370
Welland :																						
Males	3	59	59	25	8	6	1	5	5	2	....	1	2	....	....	176						
Females	40	76	33	6	5	8	2	2	1	1	1	....	....	....	1	176						
Total	43	135	92	31	13	14	3	7	6	3	1	1	2	....	1	352	147	29	176	159	17	176
Wellington :																						
Males	3	156	164	72	30	16	8	5	5	1	1	....	....	....	1	462						
Females	88	233	95	25	9	3	5	2	....	....	....	....	....	....	2	462						
Total	91	389	259	97	39	19	13	7	5	1	1	....	....	....	3	924	414	48	462	448	14	462
Wentworth :																						
Males	12	245	172	80	33	12	17	7	5	1	2	1	....	1	....	588						
Females	124	276	118	28	20	12	2	4	1	1	2	....	....	....	....	588						
Total	136	521	290	108	53	24	19	11	6	2	4	1	...	1	...	1176	532	56	588	549	39	588
York :																						
Males	16	497	398	160	75	49	29	19	10	6	1	2	1	....	1	1264						
Females	191	650	256	70	46	19	12	9	2	1	2	....	....	....	6	1264						
Total	207	1147	654	230	121	68	41	28	12	7	3	2	1	....	7	2528	1121	143	1264	1188	76	1264
Total Males	162	4859	4493	1738	767	374	241	155	115	74	40	31	18	2	37	13106						
Total Females	2793	6578	2272	652	312	186	108	72	38	29	12	5	1	....	48	13106						
Grand Total	2955	11437	6765	2390	1079	560	349	227	153	103	52	36	19	2	85	26212	11693	1413	13106	12387	719	13106

DEATHS.

TABLE E.—DEATHS, BY AGES,

Distinguishing by Months, by Ages, and by Sex, the Registered Number of Deaths

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Females	....	1	1	....	....	....	....	....	1	1	....	....	4
Males	4	9	2	5	7	3	3	6	2	2	3	5	53
Females	3	5	4	2	3	3	2	1	3	3	3	2	34
Total	7	14	6	7	10	6	5	7	5	5	8	7	87
Males	15	23	19	16	14	22	17	23	33	18	20	27	247
Females	5	2	1	2	....	6	4	4	2	2	1	6	35
Total	20	25	20	18	14	28	21	27	35	20	21	33	282
Males	....	....	....	....	....	....	1	....	....	1	....	....	2
Females	1	....	....	....	....	....	1	....	1	....	....	....	3
Total	1	....	....	....	....	....	2	....	1	1	....	....	5
Males	17	14	17	13	9	9	18	7	9	11	16	12	152
Females	13	16	15	16	23	7	7	4	9	13	12	10	145
Total	30	30	32	29	32	16	25	11	18	24	28	22	297
Males	....	....	1	....	1	1	....	1	....	....	....	....	4
Females	2	1	....	....	....	....	....	....	....	2	....	....	5
Total	2	1	1	....	1	1	....	1	....	2	....	....	9
Males	1	5	11	4	8	5	1	6	....	4	5	4	54
Females	1	2	3	6	3	2	1	....	....	1	7	3	29
Total	2	7	14	10	11	7	2	6	....	5	12	7	83
Males	5	1	4	3	3	5	2	4	3	3	2	2	37
Females	1	3	6	6	2	1	4	8	3	5	4	2	45
Total	6	4	10	9	5	6	6	12	6	8	6	4	82
Males	5	14	14	9	10	18	13	18	16	12	6	17	152
Females	7	12	15	9	15	12	16	11	14	14	7	11	143
Total	12	26	29	18	25	30	29	29	30	26	13	28	295
Males	14	5	10	6	4	4	9	17	12	5	2	7	95
Females	10	6	2	8	7	4	9	12	4	5	7	9	83
Total	24	11	12	14	11	8	18	29	16	10	9	16	178

MONTHS AND DISEASES.

from various specified Causes (Alphabetically Arranged) during the year 1881.

CAUSES OF DEATH.	AGES.													
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Abortion	....	....	...	...	...	...	3	1	...	....	....	....	....	....	4
Abscess	3	2	2	2	3	6	2	9	7	9	4	....	....	4	53
"	2	2	3	....	..	3	14	1	3	2	1	1	....	2	34
Total	5	4	5	2	3	9	16	10	10	11	5	1	....	6	87
Accident	5	9	14	27	25	38	23	29	23	20	15	9	...	10	247
"	....	5	4	2	3	....	2	3	1	5	3	4	1	2	35
Total	5	14	18	29	28	38	25	32	24	25	18	13	1	12	282
Ague	....	1	....	....	....	....	....	....	1	....	....	....	....	..	2
"	...	....	...	...	....	1	...	....	2	....	..	....	....	....	3
Total	....	1	...	....	....	1	...	....	3	....	....	....	....	....	5
Apoplexy	3	1	....	1	4	1	10	15	23	29	44	14	....	7	152
"	2	1	...	1	....	6	8	15	20	25	50	8	2	7	145
Total	5	2	....	2	4	7	18	30	43	54	94	22	2	14	297
Ascites	....	....	....	....	....	....	....	3	....	....	....	....	....	1	4
"	....	....	....	....	....	....	1	2	....	1	....	1	....	....	5
Total	....	....	....	....	....	....	1	5	....	1	....	1	....	1	9
Asthma	1	1	2	....	....	5	1	3	5	15	12	8	1	....	53
"	....	1	....	....	....	3	3	1	6	8	6	....	....	1	29
Total	1	2	2	....	...	8	4	4	11	23	18	8	1	1	83
Atrophy	....	...	2	...	....	2	2	4	6	21	....	....	....	....	37
"	....	1	1	2	1	10	3	4	10	13	....	....	....	....	45
Total	...	1	3	2	1	12	5	8	16	34	....	....	....	..	82
Brain, Disease of	39	12	9	6	5	7	9	19	13	14	15	1	....	3	152
" "	29	31	10	5	4	10	9	8	8	13	8	3	....	5	143
Total	68	43	19	11	9	17	18	27	21	27	23	4	....	8	295
Brain, Congestion of	37	29	3	3	1	3	6	4	3	2	4	..	....	...	95
" "	29	18	7	5	2	7	3	4	2	1	2	1	....	2	83
Total	66	47	10	8	3	10	9	8	5	3	6	1	....	2	178

TABLE E.—DEATHS, BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	4	2	1	4	2	3	5	1	6	3	1	1	33
Females	2	3	4	4	....	....	4	5	3	2	2	....	29
Total	6	5	5	8	2	3	9	6	9	5	3	1	62
Males	23	26	26	32	30	6	12	9	9	12	14	19	218
Females	19	27	23	32	18	13	7	9	11	10	9	19	197
Total	42	53	49	64	48	19	19	18	20	22	23	38	415
Males	2	1	2	4	4	1	2	4	....	1	3	10	34
Females	6	6	3	1	9	2	....	1	1	3	3	3	38
Total	8	7	5	5	13	3	2	5	1	4	6	13	72
Males	17	9	5	16	12	16	7	12	10	7	8	12	131
Females	16	16	18	14	20	17	10	22	11	17	11	10	182
Total	33	25	23	30	32	33	17	34	21	24	19	22	313
Males	28	26	34	37	24	38	40	43	36	25	22	35	388
Females	28	28	41	38	35	37	36	38	31	44	46	34	436
Total	56	54	75	75	59	75	76	81	67	69	68	69	824
Males	1	1	4	1	....	1	1	....	1	1	....	....	11
Females	....	1	....	....	....	1	....	2	1	1	1	....	7
Total	1	2	4	1	....	2	1	2	2	2	1	....	18
Males	....	4	5	6	5	5	3	3	2	8	3	4	48
Females	....	....	1	1	....	....	....	1	1	....	....	....	4
Total	....	4	6	7	5	5	3	4	3	8	3	4	52
Males	1	3	3	3	4	3	3	5	2	1	3	2	33
Females	....	....	....	....	....	....	....	....	1	....	....	1	2
Total	1	3	3	3	4	3	3	5	3	1	3	3	35
Males	2	....	....	1	....	....	....	....	....	.	....	....	3
Females	....	....	1	....	....	....	....	....	....	....	....	....	1
Total	2	....	1	1	....	....	....	....	....	....	....	....	4
Males	4	2	4	3	3	4	1	6	1	1	....	2	31
Females	1	....	1	4	2	5	3	1	3	2	3	3	28
Total	5	2	5	7	5	9	4	7	4	3	3	5	59

MONTHS AND DISEASES, 1881.—*Continued.*

CAUSE OF DEATH.	AGES.													
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Brain, Inflammation of	10	6	6	3	1	3	....	2	....	1	....	....	....	1	33
" "	8	7	3	...	1	4	2	1	1	2	....	....	....	....	29
Total	18	13	9	3	2	7	2	3	1	3	....	....	...	1	62
Bronchitis	82	45	6	2	1	5	9	4	7	21	19	10	4	3	218
"	69	29	11	2	2	4	6	5	8	19	26	7	....	9	197
Total	151	74	17	4	3	9	15	9	15	40	45	17	4	12	415
Burns and Scalds	1	19	1	1	3	2	1	1	1	1	1	..	....	2	34
" "	2	19	2	1	1	2	.	2	....	2	2	....	....	5	38
Total	3	38	3	2	4	4	1	3	1	3	3	..	...	7	72
Cancer	...	....	1	....	....	1	1	15	25	40	32	15	....	1	131
"	1	2	1	...	1	5	11	36	50	33	27	7	1	7	182
Total	1	2	2	....	1	6	12	51	75	73	59	22	1	8	313
Cause not specified	14	68	27	22	12	33	33	44	38	44	4	....	....	49	388
" "	8	77	27	16	29	63	56	42	38	50	....	....	....	30	436
Total	22	145	54	38	41	96	89	86	76	94	4	....	....	79	824
Cyanosis	10	....	....	....	....	1	....	....	....	....	....	..	....	..	11
"	7	...	....	....	....	....	....	....	....	....	....	....	....	....	7
Total	17	....	..	....	...	1	....	..	....	....	...	....	..	....	18
Cystites	....	....	....	....	....	3	....	....	6	10	18	7	1	3	48
"	....	....	....	1	....	....	1	....	....	...	1	....	....	1	4
Total	....	....	....	1	....	3	1	....	6	10	19	7	1	4	52
Calculus	1	....	1	....	....	1	....	....	1	7	11	9	2	....	33
"	....	....	1	..	....	....	....	..	....	....	1	...	....	....	2
Total	1	....	2	....	....	1	...	....	1	7	12	9	2	....	35
Cephalitis	2	...	....	....	....	....	....	....	....	....	1	....	....	...	3
"	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1
Total	2	...	....	....	....	1	....	...	....	....	1	....	....	....	4
Cerebro-Spinal Meningitis	6	8	2	1	4	1	2	2	1	...	....	....	....	4	31
" " "	6	6	3	....	3	2	2	....	....	3	....	....	....	3	28
Total	12	14	5	1	7	3	4	2	1	3	....	...	....	7	59

TABLE E.—DEATHS, BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Females	10	23	26	19	16	15	11	6	7	4	10	11	158
Males	....	1	2	1	4	4	9	23	11	5	1	....	61
Females	1	....	....	1	2	1	4	16	6	3	....	...	34
Total	1	1	2	2	6	5	13	39	17	8	1	....	95
Males	2	....	1	1	2	9	56	69	61	21	1	4	227
Females	1	1	2	....	1	7	35	71	45	8	2	3	176
Total	3	1	3	1	3	16	91	140	106	29	3	7	403
Males	22	23	39	25	18	18	27	19	23	15	14	15	258
Females	19	20	20	20	26	24	25	24	25	17	15	16	251
Total	41	43	59	45	44	42	52	43	48	32	29	31	509
Males	45	26	33	20	14	11	8	11	14	25	45	48	300
Females	25	30	13	20	9	10	6	4	11	25	41	39	223
Total	70	56	46	40	23	21	14	15	25	50	86	87	533
Males	1	2	....	1	3	8	13	31	25	13	...	1	98
Females	2	3	1	....	....	2	12	31	31	14	1	1	98
Total	3	5	1	1	3	10	25	62	56	27	1	2	196
Males	8	3	15	5	7	27	63	111	118	55	14	7	433
Females	6	10	11	14	5	14	55	112	84	55	15	4	385
Total	14	13	26	19	12	41	118	223	202	110	29	11	818
Females	....	....	....	1	....	....	1	1	..	...	2	....	5
Males	13	21	19	15	21	13	19	20	16	16	15	15	203
Females	15	18	26	18	20	17	24	18	19	27	18	24	244
Total	28	39	45	33	41	30	43	38	35	43	33	39	447
Males	52	34	42	35	35	37	36	29	40	77	87	63	567
Females	47	43	49	46	33	28	30	29	43	77	95	84	604
Total	99	77	91	81	68	65	66	58	83	154	182	147	1171
Males	5	2	1	3	4	6	5	...	5	5	2	5	43
Females	....	1	....	1	1	1	1	1	1	....	2	1	10
Total	5	3	1	4	5	7	6	1	6	5	4	6	53

MONTHS AND DISEASES, 1881.—*Continued.*

CAUSES OF DEATH.	AGES.													
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Childbirth	....	....	....	....	6	64	62	21	....	....	....	....	....	5	158
Cholera Morbus	....	....	1	1	1	7	8	8	10	15	5	5	....	....	61
" "	....	....	1	1	....	7	7	1	3	8	2	3	....	1	34
Total	....	....	2	2	1	14	15	9	13	23	7	8	....	1	95
Cholera Infantum	182	45	....	....	....	....	....	....	....	....	....	....	....	....	227
" "	135	41	....	....	....	....	....	....	....	....	....	....	....	....	176
Total	317	86	....	....	....	....	....	....	....	....	....	....	....	....	403
Convulsions	206	52	....	....	....	....	....	....	....	....	....	....	....	....	258
"	171	80	....	....	....	....	....	....	....	....	....	....	....	....	251
Total	377	132	....	....	....	....	....	....	....	....	....	....	....	....	509
Croup	57	189	47	2	....	....	....	....	....	....	....	....	....	5	300
"	41	143	43	4	1	....	....	....	....	....	....	....	....	1	233
Total	98	332	90	6	1	....	....	....	....	....	....	....	....	6	533
Dysentery	45	29	....	3	....	1	...	2	2	2	8	2	....	4	98
"	42	26	....	....	....	2	2	3	3	9	5	2	1	3	98
Total	87	55	....	3	....	3	2	5	5	11	13	4	1	7	196
Diarrhœa	294	80	4	1	2	6	3	2	7	6	12	14	....	2	433
"	219	88	5	...	....	5	9	3	8	13	21	6	3	5	385
Total	513	168	9	1	2	11	12	5	15	19	33	20	3	7	818
Dropsy, Ovarian	....	...	....	....	....	....	1	2	1	1	...	.	....	....	5
Dropsy	9	4	10	2	3	9	6	19	33	48	43	13	2	2	203
"	5	9	7	3	5	19	26	25	35	43	40	21	....	6	244
Total	14	13	17	5	8	28	32	44	68	91	83	34	2	8	447
Diphtheria	52	242	165	58	18	9	2	3	1	1	....	1	....	15	567
"	42	259	177	65	23	9	2	4	....	2	....	1	....	22	604
Total	94	501	342	123	41	18	4	7	1	3	....	2	....	35	1171
Diabetes	...	1	3	5	3	4	4	7	6	6	2	....	....	2	43
"	....	2	....	1	....	...	1	2	1	2	....	....	...	1	10
Total	....	3	3	6	3	4	5	9	7	8	2	....	....	3	53

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	1	...	1	12	123	16	26	31	19	9	5	13	256
Females	1	3	....	5	99	2	4	4	2	2	3	....	125
Total	2	3	1	17	222	18	30	35	21	11	8	13	381
Males	5	....	2	...	4	2	5	3	1	2	5	3	32
Females	1	2	1	3	3	....	....	4	5	4	....	....	23
Total	6	2	3	3	7	2	5	7	6	6	5	3	55
Males	20	17	20	19	14	16	34	28	30	34	13	19	264
Females	18	11	17	16	21	10	21	32	23	17	4	11	201
Total	38	28	37	35	35	26	55	60	53	51	17	30	465
Males	6	3	2	4	2	6	4	5	4	4	5	8	53
Females	3	4	6	5	5	5	5	6	5	5	6	5	60
Total	9	7	8	9	7	11	9	11	9	9	11	13	113
Males	6	4	11	7	7	5	1	4	2	2	2	8	59
Females	7	4	9	6	5	5	4	3	3	2	4	6	58
Total	13	8	20	13	12	10	5	7	5	4	6	14	117
Males	1	1	2	1	....	....	....	2	1	....	1	....	9
Females	2	....	....	1	...	....	....	....	....	1	....	1	5
Total	3	1	2	2	....	....	....	2	1	1	1	1	14
Males	6	5	2	5	7	3	9	14	14	14	3	4	86
Females	8	6	8	5	4	3	6	9	14	13	11	4	91
Total	14	11	10	10	11	6	15	23	28	27	14	8	177
Males	1	2	....	1	7	....	4	3	5	4	4	2	33
Females	3	3	1	5	2	1	6	4	8	5	3	2	43
Total	4	5	1	6	9	1	10	7	13	9	7	4	76
Males	22	26	35	19	18	28	30	12	2	13	16	13	234
Females	16	30	35	23	12	31	22	7	11	12	18	19	236
Total	38	56	70	42	30	59	52	19	13	25	34	32	470
Males	14	13	8	11	11	12	9	24	63	89	53	36	343
Females	7	5	8	8	6	6	16	29	55	53	56	24	273
Total	21	18	16	19	17	18	25	53	118	142	109	60	616

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Drowned	2	28	38	52	29	51	18	12	7	8	3	2	1	5	256
"	3	15	7	25	20	34	10	2	3	1	1	....	....	4	125
Total	5	43	45	77	49	85	28	14	10	9	4	2	1	9	381
Dyspepsia	3	....	....	....	....	1	2	4	2	9	7	2	....	2	32
"	4	1	...	...	1	....	2	1	2	5	7	....	....	....	23
Total	7	1	....	....	1	1	4	5	4	14	14	2	....	2	55
Enteritis	82	31	16	13	21	20	11	17	11	26	10	3	....	3	264
"	50	15	16	4	19	13	18	15	16	13	11	4	....	7	201
Total	132	46	32	17	40	33	29	32	27	39	21	7	....	10	465
Epilepsy	....	....	2	4	5	10	9	8	10	1	2	1		1	53
"	....	....	10	7	6	10	5	6	5	3	4	....	....	4	60
Total	....	....	12	11	11	20	14	14	15	4	6	1	...	5	113
Erysipelas	16	1	2	....	2	4	5	2	10	7	4	4	....	2	59
"	24	3	1	...	5	2	4	....	6	4	5	3	...	1	58
Total	40	4	3	...	7	6	9	2	16	11	9	7	....	3	117
Exhaustion	..	1	1	....	....	....	2	1	1	3	....	.	....	....	9
"	1	1	....	....	....	....	2	1	...	....	....	....	....	....	5
Total	1	2	1	....	....	....	4	2	1	3	....	....	...	....	14
Fever	14	17	9	3	5	13	3	6	2	7	4	2	..	1	86
"	15	20	3	3	9	8	10	5	7	2	2	2	....	5	91
Total	29	37	12	6	14	21	13	11	9	9	6	4	....	6	177
Fever (Remittent)	4	9	4	...	1	5	3	1	....	1	3	....	....	2	33
"	5	8	1	1	3	3	2	4	2	3	5	2	....	4	43
Total	9	17	5	1	4	8	5	5	2	4	8	2	...	6	76
Fever (Scarlet)	26	124	61	9	6	1	2	....	....	....	....	1	....	4	236
"	24	115	67	8	6	8	....	....	....	....	....	1	....	7	234
Total	50	239	128	17	12	9	2	....	...	....	....	2	....	11	470
Fever (Typhoid)	5	20	18	22	59	97	39	27	19	16	8	1	....	12	343
"	9	17	18	26	41	83	25	16	15	12	5	1	....	5	273
Total	14	37	36	48	100	180	64	43	34	28	13	2	....	17	616

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Total.
Males	1	3	1	1	1	1	1	1	1	2	1	2	16
Females	....	1	4	....	1	1	2	....	1	....	....	....	10
Total	1	4	5	1	2	2	3	1	2	2	1	2	26
Males	2	4	....	....	....	....	....	....	....	....	....	2	8
Females	2	....	1	....	....	....	....	....	....	....	1	....	4
Total	4	4	1	....	....	....	....	....	....	....	1	2	12
Males	2	3	1	4	2	7	5	8	5	6	3	4	50
Females	3	3	2	7	1	8	2	13	7	7	4	4	61
Total	5	6	3	11	3	15	7	21	12	13	7	8	111
Males	49	34	40	47	37	52	36	24	27	36	42	38	462
Females	30	40	41	54	35	27	39	38	28	39	22	31	424
Total	79	74	81	101	72	79	75	62	55	75	64	69	886
Males	5	5	1	4	4	5	4	4	8	5	6	2	53
Females	3	7	3	6	2	5	4	5	4	6	3	3	51
Total	8	12	4	10	6	10	8	9	12	11	9	5	104
Males	1	2	1	....	....	1	....	2	....	....	....	....	7
Females	....	....	1	2	1	....	....	....	1	....	1	....	6
Total	1	2	2	2	1	1	....	2	1	....	1	....	13
Males	2	2	1	....	....	2	1	4	2	....	2	5	21
Females	....	....	2	1	1	....	4	2	2	....	....	1	13
Total	2	2	3	1	1	2	5	6	4	....	2	6	34
Males	1	....	1	....	....	1	....	2	1	....	1	1	8
Females	....	1	....	1	....	....	....	....	1	....	....	1	4
Total	1	1	1	1	....	1	....	2	2	....	1	2	12
Males	8	7	14	9	7	10	6	12	14	9	12	8	116
Females	7	8	14	12	3	10	5	5	10	7	5	9	95
Total	15	15	28	21	10	20	11	17	24	16	17	17	211
Males	6	12	15	21	7	4	12	5	13	6	11	6	118
Females	6	10	10	11	8	10	7	8	7	14	7	8	106
Total	12	22	25	32	15	14	19	13	20	20	18	14	224

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Fractures and Contusions	....	....	1	....	2	....	....	4	1	1	3	2	1	1	16
" "	....	....	....	....	....	....	....	....	....	1	3	6	....	....	10
Total	....	....	1	....	2	....	....	4	1	2	6	8	1	1	26
Frozen	....	....	....	....	1	....	1	2	1	1	1	....	....	1	8
"	....	....	....	....	1	....	....	1	....	....	....	....	....	2	4
Total	....	....	....	....	2	....	1	3	1	1	1	....	....	3	12
Gastritis	9	3	1	....	1	4	4	1	5	15	5	2	....	....	50
"	8	3	3	1	5	4	6	6	9	11	3	1	....	1	61
Total	17	6	4	1	6	8	10	7	14	26	8	3	....	1	111
Heart Disease	14	5	10	9	20	29	37	51	57	98	100	17	2	13	462
"	12	2	9	15	8	49	37	55	61	78	60	22	....	16	424
Total	26	7	19	24	28	78	74	106	118	176	160	39	2	29	886
Hemorrhage	11	....	2	2	1	4	9	5	7	3	5	....	....	4	53
"	10	5	1	1	....	10	11	5	2	3	2	....	....	1	51
Total	21	5	3	3	1	14	20	10	9	6	7	....	....	5	104
Hepatitis	....	....	....	....	1	1	1	....	1	1	1	....	....	1	7
"	....	....	....	....	....	....	1	....	1	2	1	....	....	1	6
Total	....	....	....	....	1	1	2	....	2	3	2	....	....	2	13
Hernia	....	....	....	....	....	1	5	2	2	2	4	3	....	2	21
"	....	1	....	1	....	1	3	....	1	2	2	....	....	2	13
Total	....	1	....	1	....	2	8	2	3	4	6	3	....	4	34
Homicide	....	1	....	....	....	1	1	1	1	2	....	....	....	1	8
"	2	....	....	....	....	....	1	1	....	....	....	....	....	....	4
Total	2	1	....	....	....	1	2	2	1	2	....	....	....	1	12
Hydrocephalus	69	40	4	1	....	....	....	1	....	....	....	....	....	1	116
"	64	26	3	1	....	....	....	....	....	....	....	....	....	1	95
Total	133	66	7	2	....	....	....	1	....	....	....	....	....	2	211
Inflammation	49	18	9	6	7	1	2	2	7	8	6	1	....	2	118
"	40	12	3	6	1	10	7	8	5	5	7	1	....	1	106
Total	89	30	12	12	8	11	9	10	12	13	13	2	....	3	224

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	7	4	5	4	1	1	1	....	....	....	1	3	27
Females	6	5	6	2	1	....	....	....	....	1	2	1	24
Total	13	9	11	6	2	1	1	....	....	1	3	4	51
Males	63	70	83	69	43	63	90	103	87	74	45	39	829
Females	42	48	63	44	34	46	68	98	73	58	40	38	652
Total	105	118	146	113	77	109	158	201	160	132	85	77	1481
Males	18	22	27	18	29	10	21	29	25	27	26	33	285
Females	15	12	17	13	14	17	19	20	22	18	11	15	193
Total	33	34	44	31	43	27	40	49	47	45	37	48	478
Males	1	....	2	2	2	1	2	1	....	1	1	1	14
Females	....	1	....	....	1	1	4	....	3	3	...	2	15
Total	1	1	2	2	3	2	6	1	3	4	1	3	29
Males	5	4	6	2	4	1	3	2	2	1	7	5	42
Females	....	....	....	1	....	1	2	....	....	1	1	....	6
Total	5	4	6	3	4	2	5	2	2	2	8	5	48
Males	....	....	....	....	....	1	....	....	....	1	....	1	3
Females	....	....	1	....	....	1	....	....	1	....	....	....	3
Total	....	....	1	....	....	2	....	....	1	1	....	1	6
Males	3	4	1	3	2	3	6	3	3	4	2	3	37
Females	1	3	3	2	....	2	....	1	2	1	1	4	20
Total	4	7	4	5	2	5	6	4	5	5	3	7	57
Males	1	2	....	....	1	3	....	1	3	1	2	....	14
Females	....	....	1	....	....	....	1	....	....	....	1	....	3
Total	1	2	1	....	1	3	1	1	3	1	3	....	17
Males	9	8	3	8	2	6	4	3	5	9	3	7	67
Females	2	2	3	9	1	3	2	....	2	4	5	4	37
Total	11	10	6	17	3	9	6	3	7	13	8	11	104
Males	....	....	....	....	....	1	2	1	1	....	....	....	5
Females	....	....	....	....	....	....	....	....	1	....	....	....	1
Total	....	....	....	....	....	1	2	1	2	....	....	....	6

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.													
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Influenza	11	3	2	1	2	2	....	....	....	....	4	2	....	....	27
"	15	3	1	1	...	1	....	....	....	1	2	....	....	....	24
Total	26	6	3	2	2	3	...	....	....	1	6	2	....	....	51
Infantile Debility	756	73	....	....	....	....	....	....	....	....	....	....	....	....	829
"	574	78	....	....	....	....	....	....	....	....	....	..	..	....	652
Total	1330	151	...	....	...	....	....	....	....	....	....	....	....	....	1481
Infantile Premature	285	....	....	....	....	....	....	....	....	....	....	....	....	....	285
"	193	....	....	....	....	....	....	....	....	....	....	....	..	....	193
Total	478	....	....	....	....	....	....	....	....	....	....	....	....	....	478
Insanity	....	....	....	....	....	4	3	3	2	....	1	....	....	1	14
"	....	....	1	....	....	2	4	3	2	2	....	1	....	....	15
Total	....	....	1	....	....	6	7	6	4	2	1	1	....	1	29
Intemperance	....	....	...	....	....	2	11	13	11	3	1	....	....	1	42
"	....	....	....	....	....	1	1	...	4	....	....	....	....	....	6
Total	....	....	...	....	....	3	12	13	15	3	1	....	....	1	48
Intussusception	1	....	...	....	....	1	....	...	1	....	....	....	....	....	3
"	....	....	....	....	1	1	....	....	..	....	1	....	....	....	3
Total	1	....	....	....	1	2	....	....	1	....	1	...	....	....	6
Jaundice	15	...	1	1	....	....	....	2	6	5	2	5	....	....	37
"	8	....	1	....	....	1	3	1	3	....	2	1	....	....	20
Total	23	...	2	1	...	1	3	3	9	5	4	6	....	....	57
Joint Disease	...	....	1	1	2	3	1	2	1	1	....	....	1	1	14
"	....	....	....	1	....	....	....	....	1	....	....	....	....	1	3
Total	...	....	1	2	2	3	1	2	2	1	....	....	1	2	17
Kidney Disease	5	6	2	2	2	4	4	8	2	12	10	3	1	6	67
"	4	2	2	...	1	2	9	3	2	6	3	2	....	1	37
Total	9	8	4	2	3	6	13	11	4	18	13	5	1	7	104
Killed by Lightning	...	...	..	....	1	1	2	....	1	....	....	....	....	....	5
" "	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1
Total	....	....	....	....	1	2	2	....	1	....	..	...	....	....	6

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	2	2	2	4	2	....	2	10	7	5	7	5	48
Females	....	....	....	....	....	....	....	1	1	3	2	....	7
Total	2	2	2	4	2	....	2	11	8	8	9	5	55
Males	3	3	4	....	2	2	3	1	1	2	7	1	29
Females	4	8	1	4	4	2	3	....	2	3	2	4	37
Total	7	11	5	4	6	4	6	1	3	5	9	5	66
Males	10	9	9	9	17	8	9	8	4	7	9	3	102
Females	10	5	4	10	7	7	4	9	12	5	5	11	89
Total	20	14	13	19	24	15	13	17	16	12	14	14	191
Males	5	7	5	7	4	9	....	1	4	2	7	4	55
Females	8	4	5	6	4	6	2	4	2	1	1	5	48
Total	13	11	10	13	8	15	2	5	6	3	8	9	103
Males	25	26	33	33	20	18	7	7	8	11	14	16	218
Females	16	23	30	24	18	5	3	5	8	9	14	15	170
Total	41	49	63	57	38	23	10	12	16	20	28	31	388
Males	....	1	....	....	....	1	1	....	....	1	1	....	5
Females	2	....	....	....	3	4	1	1	....	....	....	....	11
Total	2	1	....	....	3	5	2	1	....	1	1	....	16
Males	7	7	13	11	9	8	4	2	4	3	....	2	70
Females	4	8	13	15	14	7	4	2	4	1	2	4	78
Total	11	15	26	26	23	15	8	4	8	4	2	6	148
Females	12	16	16	16	10	13	4	11	6	4	6	13	127
Males	4	7	6	10	4	8	8	3	4	2	7	2	65
Females	4	5	3	5	6	6	7	2	3	1	3	2	47
Total	8	12	9	15	10	14	15	5	7	3	10	4	112
Males	2	2	5	5	4	3	2	2	2	5	....	4	36
Females	1	1	1	1	...	....	....	....	1	....	1	....	6
Total	3	3	6	6	4	3	2	2	3	5	1	4	42

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Killed by Cars	....	....	2	1	7	19	4	4	2	1	2	1	....	5	48
" "	....	....	....	....	....	....	1	2	1	....	1	2	....	....	7
Total	....	....	2	1	7	19	5	6	3	1	3	3	....	5	55
Laryngitis	3	7	4	3	1	1	....	2	3	1	3	...	....	1	29
"	6	9	5	1	1	2	1	1	2	3	1	1	....	4	37
Total	9	16	9	4	2	3	1	3	5	4	4	1	....	5	66
Liver Disease	8	....	1	2	2	3	13	11	17	26	14	2	....	3	102
"	....	4	4	5	3	9	7	14	17	14	10	..	....	2	89
Total	8	4	5	7	5	12	20	25	34	40	24	2	...	5	191
Lungs, Disease of	14	2	3	....	1	5	5	7	4	7	4	....	1	2	55
" "	9	4	....	3	3	12	4	6	1	1	4	....	....	1	48
Total	23	6	3	3	4	17	9	13	5	8	8	....	1	3	103
Lungs, Congestion of	62	29	9	2	5	12	8	12	26	16	25	8	1	3	218
" "	28	37	10	6	4	11	15	10	10	14	18	4	...	3	170
Total	90	66	19	8	9	23	23	22	36	30	43	12	1	6	388
Malformation	5	....	....	....	....	....	....	....	....	....	....	....	....	....	5
"	11	....	....	....	....	....	....	....	....	....	....	....	....	....	11
Total	16	....	....	....	....	....	....	....	....	....	....	....	....	....	16
Measles	21	30	8	3	2	4	1	....	...	....	...	....	....	1	70
"	17	28	6	8	2	6	3	4	1	....	1	...	....	2	78
Total	38	58	14	11	4	10	4	4	1	....	1		....	3	148
Metria	....	....	....	....	12	57	42	6	....	....	....		....	10	127
Meningitis	20	19	11	2	2	2	2	2	1	....	...	....	....	4	65
"	13	21	5	....	1	4	....	1	1	..	....	....	...	1	47
Total	33	40	16	2	3	6	2	3	2	....	....	....	....	5	112
Mortification	....	1	....	2	....	1	..	3	1	11	10	6	....	1	36
"	....	1	....	....	....	....	1	1	....	1	2	....	....	....	6
Total	...	2	....	2	....	1	1	4	1	12	12	6	....	1	42

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	4	5	5	5	3	1	3	3	4	5	6	10	54
Females	2	1	6	3	3	2	3	4	1	3	3	3	34
Total	6	6	11	8	6	3	6	7	5	8	9	13	88
Males	2	....	2	1	...	....	1	....	...	1	....	....	7
Females	....	....	1	...	1	....	....	....	....	1	....	....	3
Total	2	...	3	1	1	....	1	....	....	2	....	....	10
Males	1	....	1	....	...	...	....	....	...	...	...	....	2
Females	....	....	1	....	1	1	....	....	1	....	1	....	5
Total	1	....	2	....	1	1	....	....	1	....	1	....	7
Males	....	....	1	...	....	1	....	1	1	...	....	....	4
Females	....	....	...	1	....	....	....	....	1	4	....	....	6
Total	....	....	1	1	....	1	....	1	2	4	....	....	10
Males	8	5	5	4	3	4	3	....	2	5	4	10	53
Females	5	2	4	5	5	4	1	5	5	8	4	3	51
Total	13	7	9	9	8	8	4	5	7	13	8	13	104
Males	89	83	84	99	67	79	70	78	67	76	92	85	969
Females	95	85	112	91	77	61	77	95	81	70	62	97	1003
Total	184	168	196	190	144	140	147	173	148	146	154	182	1972
Males	22	24	19	27	12	23	20	19	16	15	20	16	233
Females	9	19	20	15	14	14	16	22	18	21	9	18	195
Total	31	43	39	42	26	37	36	41	34	36	29	34	428
Females	...	1	1	1	3	....	1	....	....	....	....	....	7
Males	2	...	1	....	....	....	....	....	...	...	....	...	3
Females	1	1	1	....	2	....	....	1	....	....	....	....	6
Total	3	1	2	....	2	....	....	1	....	....	....	....	9
Males	4	6	7	6	3	5	8	4	4	7	5	4	63
Females	5	8	4	10	9	7	12	11	9	9	3	5	92
Total	9	14	11	16	12	12	20	15	13	16	8	9	155

MONTHS AND DISEASES. 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Nephria	1	2	1	...	2	4	6	6	8	11	10	1	1	1	54
"	...	...	2	1	1	4	3	10	6	5	1	...	...	1	34
Total	1	2	3	1	3	8	9	16	14	16	11	1	1	2	88
Nephritis	2	...	1	...	...	...	...	1	...	1	2	...	...	...	7
"	...	1	...	...	...	1	1	...	...	...	...	...	...	...	3
Total	2	1	1	...	...	1	1	1	...	1	2	...	...	...	10
Neuralgia	...	...	1	...	..	...	...	...	...	1	...	...	...	...	2
"	...	...	...	...	...	2	...	..	...	2	1	...	...	...	5
Total	...	..	1	...	...	2	...	...	...	3	1	...	...	...	7
Noma (Canker)	3	...	...	...	...	..	...	...	...	...	...	...	...	1	4
"	5	1	...	...	...	...	...	...	...	...	...	...	...	...	6
Total	8	1	...	...	...	...	...	...	...	...	...	...	...	1	10
Other Diseases	7	1	2	2	5	2	8	2	8	7	1	...	...	8	53
"	4	8	1	1	5	6	2	6	4	4	5	...	...	5	51
Total	11	9	3	3	10	8	10	8	12	11	6	...	..	13	104
Old Age	...	...	...	...	...	...	...	...	...	12	388	438	123	8	969
"	.	...	.	...	...	...	...	...	...	8	456	426	110	3	1003
Total	...	...	...	...	...	...	...	...	...	20	844	864	233	11	1972
Paralysis	...	3	3	2	3	5	10	22	23	61	71	25	...	5	233
"	1	4	3	2	1	7	6	14	19	56	51	23	2	6	195
Total	1	7	6	4	4	12	16	36	42	117	122	48	2	11	428
Paramenia	...	...	...	...	2	1	2	1	1	..	...	...	...	...	7
Pericarditis	1	...	...	...	...	...	1	...	...	...	...	...	...	1	3
"	...	...	1	2	1	1	1	...	...	...	..	...	...	...	6
Total	1	...	1	2	1	1	2	...	...	...	...	...	...	1	9
Peritonitis	6	2	1	10	6	14	4	5	5	5	2	...	...	3	63
"	2	9	5	2	7	25	15	12	2	3	4	2	...	4	92
Total	8	11	6	12	13	39	19	17	7	8	6	2	...	7	155

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	97	88	101	95	81	82	89	88	72	85	90	91	1059
Females	111	103	106	117	116	107	103	114	107	122	116	116	1338
Total	208	191	207	212	197	189	192	202	179	207	206	207	2397
Males	81	86	84	100	53	37	28	17	20	37	41	57	641
Females	49	73	65	64	45	34	15	21	19	27	38	46	496
Total	130	159	149	164	98	71	43	38	39	64	79	103	1137
Males	1	2	4	2	1	1	3	2	1	1	1	3	22
Females	1	....	1	1	3	1	1	..	....	1	2	5	16
Total	2	2	5	3	4	2	4	2	1	2	3	8	38
Males	....	....	..	3	....	2	2	3	1	1	...	4	16
Females	2	1	1	....	1	2	1	....	....	1	1	1	11
Total	2	1	1	3	1	4	3	3	1	2	1	5	27
Males	....	....	....	1	1	....	1	....	..	....	....	....	3
Females	....	....	2	1	....	1	....	....	....	....	....	....	4
Total	....	....	2	2	1	1	1	....	....	....	....	....	7
Males	2	1	1	2	2	1	5	5	4	6	2	5	36
Females	2	3	8	6	....	4	....	2	....	1	6	4	36
Total	4	4	9	8	2	5	5	7	4	7	8	9	72
Males	....	1	..	....	....	....	....	....	....	....	....	1	2
Females	..	2	....	1	....	....	1	....	....	....	1	....	5
Total	....	3	....	1	...	...	1	....	....	....	1	1	7
Males	8	7	8	6	5	7	8	5	3	4	4	3	68
Females	9	9	12	6	7	8	7	6	4	4	8	4	84
Total	17	16	20	12	12	15	15	11	7	8	12	7	152
Males	....	1	2	1	6	....	1	....	4	1	1	2	19
Females	1	1	2	....	....	3	2	1	1	3	....	1	15
Total	1	2	4	1	6	3	3	1	5	4	1	3	34
Males	....	....	2	....	2	....	2	1	1	....	..	....	8
Females	2	....	....	2	....	....	1	1	....	....	....	....	6
Total	2	..	2	2	2	....	3	2	1	...	....	....	14

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Phthisis	37	38	12	17	65	316	183	133	106	79	39	4	....	30	1059
"	34	35	16	35	157	447	259	137	94	62	18	3	....	41	1338
Total	71	73	28	52	222	763	442	270	200	141	57	7	....	71	2397
Pneumonia	143	86	16	7	18	51	38	56	58	65	57	16	2	28	641
"	99	82	24	10	29	29	42	38	29	42	36	15	1	20	496
Total	242	168	40	17	47	80	80	94	87	107	93	31	3	48	1137
Pleurisy	....	....	1	2	2	1	....	6	4	2	4	....	....	....	22
"	1	1	....	2	2	1	1	2	....	....	3	1	..	2	16
Total	1	1	1	4	4	2	1	8	4	2	7	1	....	2	38
Poison	3	2	2	...	....	1	1	1	1	2	1	1	....	1	16
"	1	4	....	....	....	2	....	....	2	....	1	1	....	....	11
Total	4	6	2	....	....	3	1	1	3	2	2	2	....	1	27
Purpura (Scurvy)	....	....	....	....	1	....	....	1	....	....	....	....	....	1	3
"	2	1	....	....	....	....	....	..	....	....	1	....	....	....	4
Total	2	1	....	....	1	....	....	1	...	....	1	....	....	1	7
Pyæmia	4	2	....	4	2	7	2	4	4	3	3	1	....	....	36
"	4	3	1	...	2	5	10	5	1	2	..	1	...	2	36
Total	8	5	1	4	4	12	12	9	5	5	3	2	....	2	72
Quinsy	1	1	....	....	....	....	....	....	....	....	....	....	....	..	2
"	1	2	....	1	....	....	....	....	1	....	....	....	....	....	5
Total	2	3	...	1	....	....	....	....	1	....	..	....	..	....	7
Rheumatism	....	3	6	4	6	5	5	10	10	8	7	2	....	2	68
"	....	...	11	6	8	11	4	10	6	8	10	4	....	6	84
Total	....	3	17	10	14	16	9	20	16	16	17	6	....	8	152
Scrofula	7	1	1	2	1	2	....	....	....	1	1	....	....	3	19
"	5	1	2	1	1	2	1	....	....	1	....	....	....	1	15
Total	12	2	3	3	2	4	1	....	....	2	1	....	....	4	34
Skin Disease	6	....	..	....	....	....	1	...	...	....	....	....	....	1	8
"	4	1	....	....	....	..	....	....	....	....	...	....	....	1	6
Total	10	1	....	....	....	...	1	....	...	....	....	....	....	2	14

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	1	1	....	1	1	....	....	....	....	....	....	....	4
Females	....	....	....	....	....	....	....	....	....	....	....	1	1
Total	1	1	....	1	1	....	....	....	....	....	....	1	5
Males	8	4	7	4	5	4	1	1	4	7	6	10	61
Females	2	2	4	2	5	1	3	6	4	3	1	3	36
Total	10	6	11	6	10	5	4	7	8	10	7	13	97
Males	....	....	....	1	3	....	....	....	....	1	....	....	5
Females	1	1	1	2	....	1	1	2	1	2	....	....	12
Total	1	1	1	3	3	1	1	2	1	3	....	....	17
Males	....	....	....	....	1	....	....	3	....	....	....	....	
Females	....	....	....	....	....	....	....	1	....	....	....	....	1
Total	....	....	....	....	1	....	....	4	....	....	....	....	5
Males	....	....	....	1	....	....	1	1	....	1	....	1	5
Females	1	1	....	....	....	....	....	....	....	....	....	....	2
Total	1	1	....	1	....	....	1	1	....	1	....	1	7
Males	1	1	....	....	....	....	....	....	....	....	....	2	4
Males	....	1	....	....	....	2	....	....	2	1	....	....	
Females	1	....	....	1	....	....	....	....	1	....	....	....	
Total	1	1	....	1	....	2	....	....	3	1	....	....	9
Males	1	3	6	4	2	4	1	1	6	2	2	2	34
Females	....	1	....	2	....	2	2	....	3	....	2	1	13
Total	1	4	6	6	2	6	3	1	9	2	4	3	47
Males	5	6	3	1	5	7	4	....	4	1	....	2	38
Females	1	....	....	1	1	1	....	1	3	1	1	1	11
Total	6	6	3	2	6	8	4	1	7	2	1	3	49
Males	....	....	....	....	2	1	9	4	2	....	....	....	18
Females	....	....	....	....	3	....	2	....	....	....	....	....	5
Total	....	....	....	....	5	1	11	4	2	....	....	....	23

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Small Pox	....	....	1	....	1	1	....	....	1	....	....	....	....	....	4
"	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1
Total	....	1	1	....	1	1	....	....	1	....	....	....	....	....	5
Spinal Disease	12	15	6	7	1	....	6	4	5	1	4	....	....	....	61
"	13	6	1	2	2	4	4	1	1	1	....	....	....	1	36
Total	25	21	7	9	3	4	10	5	6	2	4	....	....	1	97
Spina Bifida	4	1	....	....	....	....	....	....	....	....	....	....	....	....	5
"	10	....	1	....	1	....	....	....	....	....	....	....	....	....	12
Total	14	1	1	....	1	....	....	....	....	....	....	....	....	....	17
Spleen	....	....	1	....	....	1	....	....	1	1	....	....	....	....	4
"	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1
Total	....	....	1	....	....	2	....	....	1	1	....	....	....	....	5
Stricture of Intestines	....	....	....	....	....	1	....	....	2	....	2	....	....	....	5
" "	....	....	....	....	....	....	....	....	1	1	....	....	....	....	2
Total	....	....	....	....	....	1	....	....	3	1	2	....	....	....	7
Stricture of Urethra	....	....	....	....	....	....	....	....	....	....	....	3	....	1	4
Sudden (cause not known)	1	1	....	....	....	....	....	....	1	2	....	1	....	....	6
"	....	....	....	1	....	....	....	....	1	....	1	....	....	....	3
Total	1	1	....	1	....	....	....	....	2	2	1	1	....	....	9
Suffocation	19	3	1	....	....	2	3	....	2	1	....	2	....	1	34
"	9	3	....	....	....	....	....	....	....	....	....	....	....	1	13
Total	28	6	1	....	....	2	3	....	2	1	....	2	....	2	47
Suicide	....	....	....	....	....	8	5	8	5	6	3	....	....	3	38
"	....	....	....	....	1	4	3	1	1	....	....	....	....	1	11
Total	....	....	....	....	1	12	8	9	6	6	3	....	....	4	49
Sunstroke	....	....	1	1	....	....	2	....	3	3	4	2	....	2	18
"	....	1	....	1	....	....	....	....	....	1	....	....	....	2	5
Total	....	1	1	2	....	....	2	....	3	4	4	2	....	4	23

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
Males	....	1	....	1	....	....	....	1	4	1	2	....	10
Females	...	1	....	....	1	....	....	...	....	....	....	...	2
Total	....	2	....	1	1	....	...	1	4	1	2	....	12
Males	....	1	....	1	1	.. .	....	1	1	1	....	....	6
Females	....	1	1	...	1	...	2	2	1	1	..	....	9
Total	...	2	1	1	2	....	2	3	2	2	.. .	.....	15
Males	5	1	2	1	2	12	11	14	11	7	1	2	69
Females	2	4	5	3	5	5	11	8	8	4	4	3	62
Total	7	5	7	4	7	17	22	22	19	11	5	5	131
Males	....	1	1	....	1	1	1	2	2	1	1	....	11
Females	...	...	....	....	....	...	1	....	1	....	1	1	4
Total	....	1	1	....	1	1	2	2	3	1	2	1	15
Males	1	....	1	..	1	....	....	2	....	1	1	....	7
Females	1	1	....	....	2	1	1	3	1	2	...	1	13
Total	2	1	1	....	3	1	1	5	1	3	1	1	20
Males	2	5	3	2	1	4	2	3	2	....	4	1	29
Females	3	4	5	5	5	3	6	3	6	6	3	8	57
Total	5	9	8	7	6	7	8	6	8	6	7	9	86
Males	....	1	..	2	2	2	...	2	2	1	....	1	13
Females	....	....	....	....	2	1	....	1	1	1	2	1	9
Total	....	1	....	2	4	3	....	3	3	2	2	2	22
Males	2	1	....	3	1	4	4	1	2	4	3	1	26
Females	....	1	1	2	1	1	1	3	1	1	2	2	16
Total	2	2	1	5	2	5	5	4	3	5	5	3	42
Females	2	4	8	5	3	6	2	5	1	5	3	1	45
Males	3	2	7	4	4	9	13	15	24	12	10	5	108
Females	6	12	12	12	9	11	6	22	26	20	17	9	162
Total	9	14	19	16	13	20	19	37	50	32	27	14	270

MONTHS AND DISEASES, 1881—*Continued.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Syphilis	4	....	....	....	1	3	....	....	1	1	....	....	....	....	10
"	1	....	....	....	....	....	1	....	....	....	....	....	....	....	2
Total	5	....	....	....	1	3	1	....	1	1	....	....	....	....	12
Tabes Mesenterica	2	3	....	....	1	....	....	....	....	....	....	....	....	....	6
" "	4	3	2	....	....	....	....	....	....	....	....	....	....	....	9
Total	6	6	2	....	1	....	....	....	....	....	....	....	....	....	15
Teething	37	32	....	....	....	....	....	....	....	....	....	....	....	....	69
"	29	33	....	....	....	....	....	....	....	....	....	....	....	....	62
Total	66	65	....	....	....	....	....	....	....	....	....	....	....	....	131
Tetanus	....	....	....	7	....	....	1	....	....	1	1	....	....	1	11
"	....	....	1	....	....	....	....	1	....	1	....	....	....	1	4
Total	....	....	1	7	....	....	1	1	....	2	1	....	....	2	15
Thrush	7	....	....	....	....	....	....	....	....	....	....	....	....	....	7
"	12	1	....	....	....	....	....	....	....	....	....	....	....	....	13
Total	19	1	....	....	....	....	....	....	....	....	....	....	....	....	20
Tumour	1	1	....	....	1	1	6	3	4	5	5	1	....	1	29
"	1	3	....	1	3	4	4	10	17	10	3	....	....	1	57
Total	2	4	....	1	4	5	10	13	21	15	8	1	....	2	86
Ulcer	....	....	1	....	....	....	....	....	3	7	2	....	....	....	13
"	1	....	1	....	....	2	....	....	1	2	1	1	....	....	9
Total	1	....	2	....	....	2	....	....	4	9	3	1	....	....	22
Ulceration of Intestines	3	3	....	1	1	3	1	2	6	1	4	....	....	1	26
" "	1	2	....	....	....	2	....	2	3	5	1	....	....	....	16
Total	4	5	....	1	1	5	1	4	9	6	5	....	....	1	42
Uterus, Disease of	....	....	....	....	....	9	10	13	5	2	4	....	....	2	45
Whooping Cough	59	48	....	....	....	....	....	....	....	....	....	....	....	1	108
" "	91	68	1	2	....	....	....	....	....	....	....	....	....	....	162
Total	150	116	1	2	....	....	....	....	....	....	....	....	....	1	270

TABLE E.—DEATHS BY AGES,

SEX.	MONTHS.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Males	1	1	1	....	1	....	1	....	1	....	....	1	7
Females	2	2	....	....	1	....	1	...	1	1	1	....	9
Total	3	3	1	....	2	....	2	....	2	1	1	1	16
Males	....	....	....	....	....	....	....	1	2	....	....	....	3
Females	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	....	....	1	2	....	....	....	3
Total Males	966	917	1034	997	917	888	1018	1121	1096	1023	909	939	11825
Total Females	801	901	1001	965	902	756	859	1095	1008	977	853	878	10996
Grand Total	1767	1818	2035	1962	1819	1644	1877	2216	2104	2000	1762	1817	22821

MONTHS AND DISEASES, 1881—*Concluded.*

CAUSES OF DEATH.	AGES.														
	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Unknown.	Total.
Worms	1	4	2	....	....	....	....	....	....	....	....	....	....	....	7
"	4	5	....	....	....	....	....	....	....	....	....	....	....	....	9
Total	5	9	2	....	....	....	....	....	....	....	....	....	....	....	16
Wounds	....	....	....	....	....	2	....	....	1	....	....	....	....	....	3
"	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	2	....	....	1	....	....	....	....	....	3
Total Males	2940	1563	588	347	391	885	613	675	703	891	1103	673	144	309	11825
Total Females	2306	1557	556	303	458	1142	838	627	575	658	955	596	121	304	10996
Grand Total	5246	3120	1144	650	849	2027	1451	1302	1278	1549	2058	1269	265	613	22821

TABLE F.—CAUSES OF DEATH

COUNTIES.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Algoma and Thunder Bay:										
Males	.....	3	3	2	....	....	1	.....	.....	....
Females	.....	2	1	4	.....	1	3	1	....	....
Total	.....	5	4	6	.....	1	4	1	....	....
Brant:										
Males	.....	3	1	6	.....	5	3	2	...	....
Females	.....	.....	.....	9	.....	7	5	....	....	2
Total	.....	3	1	15	.....	12	8	2	....	2
Bruce:										
Males	.....	.....	5	15	.....	6	2	1	....	4
Females	1	.....	12	20	.....	9	14	3	6	1
Total	1	.....	17	35	.....	15	16	4	6	5
Carleton:										
Males	2	1	1	47	.....	10	....	2	....	4
Females	.....	4	2	52	.....	13	4	4	5	4
Total	2	5	3	99	.....	23	4	6	5	8
Dufferin:										
Males	.....	2	1	14	.....	....	....	.....	.....	....
Females	.....	3	.....	4	.....	....	.....	1	1	1
Total	.....	5	1	18	.....	....	....	1	1	1
Elgin:										
Males	.....	.....	4	9	1	9	.....	.....	...	1
Females	.....	1	.....	13	.....	9	2	2	6	....
Total	.....	1	4	22	1	18	2	2	6	1
Essex:										
Males	1	.....	1	30	.....	13	....	1	....	2
Females	.....	4	4	29	.....	11	....	2	4	2
Total	1	4	5	59	....	24	....	3	4	4
Frontenac:										
Males	.....	4	3	6	.....	5	.....	.....	.....	.....
Females	.....	3	5	5	.....	4	4	1	1	3
Total	.....	7	8	11	.....	9	4	1	1	3
Grey:										
Males	.....	2	6	15	.....	9	1	1	....	1
Females	.....	.....	10	18	.....	11	5	...	5	1
Total	.....	2	16	33	.....	20	6	1	5	2

BY COUNTIES, 1881.

Miasmatic.										Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
2	2	....	....	....	....	2	...	1	1	.....	....	6	.....	.....	...	... ..	... ..
1	2	....	1	....	....	1	....	2	.....	.....	1	6	.....	.....	1	.....	....
3	4	....	1	....	....	3	...	3	1	.....	1	12	...	.....	1	.....	.....
2	6	6	....	....	1	10	2	2	18	.....	3	16	.....	.....	.....	#2	3
6	8	4	....	3	....	4	1	4	22	.....	1	22	2	... .	2	5	7
8	14	10	....	3	1	14	3	6	40	.....	4	38	2	.. ..	2	7	10
5	3	2	8	2	....	9	....	....	4	.....	4	23	6	.....	1	1	3
2	2	3	5	....	....	4	1	1	7	.....	3	38	1	.....	.....	2	7
7	5	4	13	2	....	13	1	1	11	.....	7	61	7	.....	1	3	10
3	50	5	....	1	....	3	4	4	2	1	4	38	21	.....	....	8	7
1	33	5	3	5	1	1	3	5	3	4	6	61	22	.....	.....	7	5
4	83	10	3	6	1	4	7	9	5	5	10	99	43	.....	.....	15	12
....	1	2	....	....	1	2	1	2	.....	.....	2	7	1	.....	.....	.....	....
1	....	....	1	....	1	....	1	.. .	.....	.. ..	.....	5	.....	.....	2	1	1
1	1	2	1	....	2	2	2	2	.....	.....	2	12	1	.....	2	1	1
4	6	2	3	1	3	5	....	....	.....	.....	.....	18	2	.....	....	1	3
3	9	3	....	1	...	6	3	3	1	.....	4	19	1	.....	1	2	3
7	15	5	3	2	3	11	3	3	1	.....	4	37	3	.....	1	3	6
5	17	9	3	3	2	22	3	7	12	.....	3	38	7	.....	2	5	2
4	17	18	....	....	3	17	1	6	4	1	3	49	1	.....	....	1	7
9	34	27	3	3	5	39	4	13	16	1	6	87	8	.....	2	6	9
....	11	3	1	3	....	8	4	....	9	.....	4	33	.....	.....	2	1	9
....	6	3	....	....	1	1	6	1	12	.....	9	38	.....	. ....	.....	3	8
....	17	6	1	3	1	9	10	1	21	.....	13	71	.....	.....	2	4	17
1	8	1	1	2	1	3	2	....	6	1	3	12	1	.....	.....	2	2
1	8	....	....	3	....	3	2	2	8	.....	4	24	2	.....	1	4	1
2	16	1	1	5	1	6	4	2	14	1	7	36	3	.....	1	6	3

TABLE F.—CAUSES OF DEATH

COUNTIES.	Nervous System.									Respiratory Organs.					
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Algoma and Thunder Bay:																
Males	....	....	2	....	2	....	....	....	2	....	2	....	....	....	2	....
Females	....	....	1	2	....	....	....	2	....	....	2	1	....	....	2	....
Total	....	....	3	2	2	....	....	2	2	....	4	1	....	....	4	....
Brant:																
Males	....	1	14	4	3	2	2	8	....	1	3	....	20	....	....	2
Females	....	1	9	4	5	1	1	3	....	1	3	....	19	1	....	5
Total	....	2	23	8	8	3	3	11	....	2	6	....	39	1	....	7
Bruce:																
Males	....	2	10	7	2	3	....	6	....	....	6	1	16	2	....	6
Females	....	1	10	7	7	2	2	8	....	....	5	2	12	2	3	4
Total	....	3	20	14	9	5	2	14	....	....	11	3	28	4	3	10
Carleton:																
Males	....	....	21	7	10	2	2	6	....	....	15	1	19	1	2	7
Females	....	....	10	7	5	....	1	9	....	....	18	....	11	2	2	5
Total	....	....	31	14	15	2	3	15	....	....	23	1	30	3	4	12
Dufferin:																
Males	....	....	5	3	....	....	....	2	....	....	2	....	5	....	....	2
Females	....	....	3	1	....	....	1	3	....	....	....	....	4	1	....	....
Total	....	....	8	4	....	....	1	5	....	....	2	....	9	1	....	2
Elgin:																
Males	....	1	7	2	10	1	5	3	....	2	6	....	15	....	....	2
Females	....	....	13	....	1	2	....	1	....	1	1	....	6	2	1	....
Total	....	1	20	2	11	3	5	4	....	3	7	....	21	2	1	2
Essex:																
Males	1	....	7	8	14	....	1	5	2	1	2	1	18	1	1	3
Females	1	....	9	8	8	....	3	5	....	....	5	....	24	....	4	2
Total	2	....	16	16	22	....	4	10	2	1	7	1	42	1	5	5
Frontenac:																
Males	2	3	19	6	7	2	1	7	2	....	18	2	10	2	2	1
Females	....	....	14	7	3	1	1	12	1	....	9	....	14	1	1	4
Total	2	3	33	13	10	3	2	19	3	....	27	2	24	3	3	5
Grey:																
Males	....	....	12	1	3	3	1	7	1	1	4	3	12	2	1	7
Females	1	1	11	10	6	3	....	1	....	....	3	....	10	1	2	5
Total	1	1	23	11	9	6	1	8	1	1	7	3	22	3	3	12

BY COUNTIES, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
1	.....	.....	.....	2	.....	4	4	2	2	9	57
1	.....	.....	1	2	.....	3	1	.....	1	17	63
2	.....	.....	1	4	.....	7	5	2	3	26	120
.....	.....	.....	2	10	.....	8	9	1	2	30	213
3	.....	1	1	3	1	10	.....	2	1	36	225
3	.....	1	3	13	1	18	9	3	3	66	438
2	.....	.....	1	32	.....	24	10	1	2	35	272
.....	.....	.....	1	16	6	18	1	.....	1	30	279
2	.....	.....	2	48	6	42	11	1	3	65	551
7	.....	.....	22	88	.....	33	25	2	2	115	605
5	.....	.....	21	64	8	83	14	1	.....	87	546
12	.....	....	43	152	8	66	39	3	2	202	1151
3	.....	.....	.....	10	.....	17	3	.....	.....	21	109
2	1	.....	.....	3	.....	9	1	.....	.....	13	65
5	1	.....	.....	13	.....	26	4	.....	.....	34	174
2	.....	.....	.....	11	.....	18	11	1	.....	40	209
1	.....	.....	.....	8	4	15	.....	1	1	36	186
3	.....	.....	.....	19	4	33	11	2	1	76	395
10	.....	.....	2	60	.....	27	11	.....	4	64	431
4	.....	.....	.....	44	12	26	2	2	2	62	411
14	.....	.....	2	104	12	53	13	2	6	126	842
5	.....	.....	2	14	.....	26	21	.....	3	49	310
1	1	.....	1	17	6	44	2	.....	2	39	295
6	1	.....	3	31	6	70	23	.....	5	88	605
5	.....	.....	2	14	.....	25	7	3	1	21	217
4	.....	.....	4	13	5	28	3	1	3	43	271
9	.....	.....	6	27	5	53	10	4	4	64	488

TABLE F.—CAUSES OF DEATH

COUNTIES.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Haldimand :										
Males	.....	1	1	10	.....	3	....	1	.....	....
Females	.....	.....	1	6	.....	7	4	1	1	....
Total	.....	1	2	16	.....	9	4	2	1	...
Halton :										
Males	.....	1	.....	3	.....	7	....	2	.....	....
Females	.....	2	.....	4	.....	4	...	1	2	1
Total	.....	3	.....	7	.....	11	....	3	2	1
Hastings :										
Males	.....	7	5	15	.....	6	6	1	....	1
Females	.....	2	3	5	1	6	10	3	2	....
Total	.....	9	8	20	1	12	16	4	2	1
Huron :										
Males	.....	1	5	21	.....	16	10	1	....	....
Females	.....	1	3	20	.....	8	11	1	6	...
Total	.....	2	8	41	.....	24	21	2	6	....
Kent :										
Males	.....	2	3	36	.....	8	....	2	....	...
Females	.....	8	.....	21	.....	7	2	....	3	1
Total	.....	10	3	47	.....	15	2	2	3	1
Lambton :										
Males	.....	3	5	13	.....	5	3	2	....	....
Females	.....	5	3	16	.....	4	....	1	3	....
Total	.....	8	8	29	.....	9	3	3	3	....
Lanark :										
Males	.....	3	3	10	.....	3	....	....	....	....
Females	.....	2	3	9	.....	1	....	1	....	....
Total	.....	5	6	19	.....	4	....	1	....	....
Leeds and Grenville :										
Males	.....	2	1	26	.....	6	6	3	....	2
Females	.....	2	6	36	.....	4	5	....	2	....
Total	.....	4	7	62	.....	10	11	3	2	2
Lennox and Addington :										
Males	.....	.....	4	1	.....	1	3	....	....	....
Females	.....	3	1	4	.....	1	1	1	1	....
Total	.....	3	5	5	.....	2	4	1	1	....

BY COUNTIES, 1881—*Continued.*

Miasmatic.										Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
6	7	....	1	1	....	12	4	....	7	.....	2	14	1	....	.....	.....	7
1	7	....	....	...	2	4	2	....	6	...	...	20	2	.....	2	....	6
7	14	..	1	1	2	6	6	....	13	.....	2	34	3	.....	2	.....	13
....	5	....	3	....	....	5	....	1	5	1	4	13	.....	. .	.....	8	1
1	3	1	1	....	....	2	..	....	2	.....	3	13	1	.....	2	....	...
1	8	1	4	....	...	7	...	1	7	1	7	26	1	.....	2	8	1
1	3	4	1	2	1	13	1	2	11	.....	1	33	3	.....	.....	3	8
2	5	3	1	1	2	13	1	7	12	.. ..	2	55	2	.....	1	2	6
3	8	7	2	3	3	26	2	9	23	.....	3	88	5	.....	1	5	14
5	12	8	1	....	1	13	2	8	5	.....	4	28	4	.....	1	1	4
3	11	4	1	2	1	5	3	....	7	.....	5	46	5	.....	....	3	2
8	23	12	2	2	2	18	5	8	12	.....	9	74	9	.....	1	4	6
9	14	8	2	....	1	27	1	3	.....	2	2	26	1	.....	.....	5	4
5	13	3	....	1	1	17	3	9	1	.....	3	30	1	. ..	2	1	6
14	27	11	2	1	2	44	4	12	1	2	5	56	2	.....	2	6	10
5	11	7	1	2	....	12	1	7	16	.....	5	16	.....	.. ...	.....	2	4
6	7	8	2	....	1	9	....	7	4	.....	2	19	2	.....	.....	3	5
11	18	15	3	2	1	21	1	14	20	.....	7	35	2	.....	.....	5	9
1	3	5	...	....	...	1	....	....	1	.....	3	17	3	.....	.....	6	3
...	2	2	1	....	1	3	3	..	1	.....	5	21	1	.....	1	3	3
1	5	7	1	....	1	4	3	....	2	.. ..	8	38	4	.....	1	9	6
...	4	8	2	1	1	11	....	1	1	1	5	50	1	.....	1	7	4
1	8	8	1	....	....	5	....	2	.....	.....	6	58	3	.....	2	8	5
1	12	16	3	1	1	16	....	3	1	1	11	108	4	.....	3	15	9
....	9	1	....	....	....	2	1	1	.....	.....	2	21	2	.....	1	1	4
....	2	....	...	1	....	1	2	....	.....	.....	1	17	1	.....	. ...	2	4
....	11	1	....	1	....	3	3	1	.....	.....	3	38	3	.....	1	3	8

TABLE F.—CAUSES OF DEATH

COUNTIES.	Nervous System.									Respiratory Organs.					
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Haldimand :																
Males	....	....	9	3	5	5	....	2	....	....	2	....	11	....	1	2
Females	....	1	4	8	2	1	1	....	....	....	2	....	7	....	....	1
Total	....	1	13	11	7	6	1	2	....	....	4	....	18	....	1	3
Halton :																
Males	....	....	5	9	5	3	....	4	1	....	3	....	14	....	1	2
Females	....	2	5	3	3	7	....	4	....	....	4	....	4	1	1	2
Total	....	2	10	12	8	10	....	8	1	....	7	....	18	1	2	4
Hastings :																
Males	....	1	7	6	6	7	1	8	1	....	6	....	13	....	2	13
Females	....	....	9	10	7	....	....	13	....	....	2	....	8	1	....	4
Total	....	1	16	16	13	7	1	21	1	....	8	....	21	1	2	17
Huron :																
Males	1	....	15	11	7	9	1	6	2	1	7	....	29	3	3	4
Females	....	....	16	10	10	8	1	13	....	....	7	....	23	1	....	2
Total	1	....	31	21	17	17	2	19	2	1	14	....	52	4	3	6
Kent :																
Males	....	1	9	2	8	6	....	5	1	....	1	....	23	2	5	1
Females	....	....	7	2	4	6	2	5	....	1	1	....	18	1	4	
Total	....	1	16	4	12	12	2	10	1	1	2	....	41	3	9	1
Lambton :																
Males	....	2	8	7	9	12	1	4	....	....	9	....	18	1	1	2
Females	....	....	13	6	8	2	3	3	....	....	9	1	14	....	....	4
Total	....	2	21	13	17	14	4	7	....	....	18	1	32	1	1	6
Lanark :																
Males	....	....	5	....	5	8	....	4	....	1	5	....	9	2	....	3
Females	....	....	4	....	1	7	....	4	....	1	3	1	8	1	....	2
Total	....	....	9	....	6	15	....	8	....	2	8	1	17	3	....	4
Leeds and Grenville :																
Males	....	....	19	9	4	3	2	6	....	2	2	1	22	1	....	14
Females	....	....	13	5	4	5	....	7	....	1	1	1	15	....	1	8
Total	....	....	32	14	8	8	2	13	....	3	3	2	37	1	1	22
Lennox and Addington :																
Males	....	....	5	4	5	3	....	5	2	....	....	1	7	....	1	6
Females	....	....	6	4	7	3	....	6	....	....	1	....	8	1	2	4
Total	....	....	11	8	12	6	....	11	2	....	1	1	15	1	3	10

BY COUNTIES, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
5	.....	.....	1	9	.....	15	5	.....	.....	11	153
4	..	.... .	.....	3	1	9	.....	.....	1	3	120
9	.....	.....	1	12	1	24	5	.....	1	14	273
2	.....	2	1	4	.....	12	6	1	.....	22	156
1	.....	....	.....	4	1	10	2	2	1	18	118
3	.....	2	1	8	1	22	8	3	1	40	274
8	.....	.... .	3	20	. .....	32	15	.....	1	43	321
5	2	1	2	21	5	36	2	.....	4	38	317
13	2	1	5	41	5	68	17	.....	5	81	638
9	.....	.....	1	21	....	45	13	3	4	55	401
3	....	1	1	15	9	36	4	.....	3	52	363
12	.....	1	2	36	9	81	17	3	7	107	764
3	.....	.....	3	19	.....	21	15	3	3	22	299
6	.....	.. ..	1	19	4	18	.. ..	2	1	32	280
9	.....	.....	4	38	4	39	15	5	4	54	579
7	.....	.....	1	16	.....	10	11	4	2	50	295
3	1	.....	1	15	4	14	1	....	3	36	248
10	1	.... .	2	31	4	24	12	4	5	86	543
1	.....	.....	.....	5	.....	16	7	1	1	8	142
....	1	.....	.....	5	1	25	1	.....	.....	8	136
1	1	.....	....	10	1	41	8	1	1	16	278
1	2	.....	.....	19	.....	50	21	4	5	38	369
.....	.....	.. ..	.....	11	4	40	2	1	3	37	321
1	2	.....	.....	30	4	90	23	5	8	75	690
1	2	.....	.....	10	.....	18	8	2	.....	16	150
.....	.....	.....	.....	4	2	23	1	.....	4	16	135
1	2	.....	.....	14	2	41	9	2	4	32	285

TABLE F.—CAUSES OF DEATH

COUNTIES.	MIASMATIC.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Lincoln :										
Males	...	...	1	6	...	9	2	3	...	...
Females	...	...	...	12	...	3	...	1	...	1
Total	...	...	1	18	...	12	2	4	...	1
Middlesex :										
Males	...	2	2	25	...	16	8	3	...	...
Females	...	4	3	28	...	12	11	2	7	...
Total	...	6	5	53	...	28	19	5	7	...
Muskoka and Parry Sound :										
Males	...	2	3	9	...	8	...	1	...	...
Females	...	1	4	2	...	6	...	...	4	...
Total	...	3	7	11	...	14	...	1	4	...
Norfolk :										
Males	...	3	2	7	...	...	2	1	...	...
Females	...	4	2	17	...	2	3	3	1	...
Total	...	7	4	24	...	2	5	4	1	...
Northumberland and Durham :										
Males	...	...	10	27	...	9	12	3	...	2
Females	...	...	6	16	...	2	11	2	2	1
Total	...	...	16	43	...	11	23	5	2	3
Ontario :										
Males	...	...	3	10	...	3	2	1	...	...
Females	...	1	5	11	...	1	4	1	3	...
Total	...	1	8	21	...	4	6	2	3	...
Oxford :										
Males	...	3	3	16	...	8	2	3	...	...
Females	...	2	1	15	...	3	2	1	6	1
Total	...	5	4	31	...	11	4	4	6	1
Peel :										
Males	...	2	1	...	...	1	4	...	...	...
Females	...	1	1	3	...	...	5	2	1	1
Total	...	3	2	3	...	1	9	2	1	1
Perth :										
Males	...	...	3	23	...	9	2	6	...	...
Females	...	...	2	21	...	8	2	2	4	...
Total	...	...	5	44	...	17	4	8	4	...

BY COUNTIES, 1881—*Continued.*

	Miasmatic.										Tubercular.				Nervous System.			
	Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
	4	9	7	2	1	1	10	5	2	10	1	2	34	.....	.....	.....	2	7
	1	8	5	2	2	1	10	....	1	10	3	6	32	1	.....	.....	2	3
	5	17	12	4	3	2	20	5	3	20	4	8	66	1	.....	.....	4	10
	8	27	17	2	2	1	11	3	1	27	.....	8	49	4	.....	.....	16	18
	9	26	13	1	3	3	15	6	4	30	.....	6	87	4	.....	.....	7	8
	17	53	30	3	5	4	26	9	5	57	.....	14	136	8	...	.....	23	26
	....	3	....	....	1	....	4	....	....	2	.....	1	11	1	.....	.....	.....	2
	....	1	1	....	1	2	4	1	....	1	.....	.....	12	.....	.....	.....	1	1
	....	4	1	....	2	2	8	1	....	3	.....	1	23	1	.....	....	1	3
	....	9	2	1	2	..	5	2	4	2	.. ...	4	11	5	.....	1	2	2
	....	8	2	....	1	....	3	2	2	....	. ...	6	27	.....	....	1	4	5
	. ..	17	4	1	3	....	8	4	6	2	.....	10	38	5	. ..	2	6	7
	5	16	2	1	....	2	6	2	3	1	.....	2	53	3	.....	2	6	12
	4	12	4	2	3	...	10	3	3	2	.....	12	61	1	.....	.....	7	10
	9	28	6	3	3	2	16	5	6	3	.....	14	144	4	.....	2	13	22
	2	15	5	1	1	....	14	1	3	5	.....	3	25	2	1	1	4	8
	7	10	4	1	2	3	12	1	1	4	.....	9	35	1	.....	1	7	2
	9	25	9	2	3	3	26	2	4	9	.....	12	60	3	1	2	11	10
	3	6	4	2	....	....	7	1	7	17	.....	5	26	2	.....	1	3	5
	4	5	4	1	3	....	7	2	8	16	.....	7	36	3	.....	.....	2	4
	7	11	8	3	3	....	14	3	15	33	.....	12	62	5	.....	1	5	9
	3	9	6	1	....	....	3	3	3	2	.....	3	7	.....	.....	.....	3	5
	2	2	2	2	....	....	1	1	....	2	.....	....	21	.....	.....	2	1	2
	5	11	8	3	....	....	4	4	3	4	.....	3	28	.....	.....	2	4	7
	1	6	5	2	2	1	8	4	1	2	.....	5	18	3	....	1	2	4
	4	5	1	1	2	2	10	3	3	10	.....	7	27	5	.....	....	2	3
	5	11	6	3	4	3	18	7	4	12	.....	12	45	8	.....	1	4	7

TABLE F.—CAUSES OF DEATH

COUNTIES.	Nervous System.									Respiratory Organs.					
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Lincoln :																
Males	....	....	12	5	3	4	1	2	2	1	2	....	13	1	2	6
Females	....	1	5	9	5	1	2	3	....	....	2	....	9	..	1	4
Total	....	1	17	14	8	5	3	5	2	1	4	....	22	1	3	10
Middlesex :																
Males	....	4	40	9	16	18	5	12	2	3	7	....	28	4	2	8
Females	....	7	29	6	19	19	1	13	....	2	14	1	30	2	3	8
Total	....	11	69	15	35	37	6	25	2	5	21	1	58	6	5	16
Muskoka and Parry Sound :																
Males	..	....	2	5	1	1	....	5	....	1	6	....	4	....	2	1
Females	....	....	1	3	....	1	....	....	....	....	1	....	3	....	1	4
Total	....	..	3	8	1	2	....	4	....	1	7	....	7	....	3	5
Norfolk :																
Males	...	....	8	3	6	4	....	3	....	2	3	....	22	1	1	9
Females	....	....	4	7	7	4	....	10	....	....	..	....	12	....	....	8
Total	...	...	12	10	13	8	....	13	....	2	3	....	34	1	1	17
Northumberland & Durham:																
Males	....	....	7	10	11	5	...	10	1	....	4	..	22	4	....	7
Females	....	....	17	3	13	10	1	12	....	1	6	1	23	1	....	8
Total	....	....	24	13	24	15	1	22	1	1	10	1	45	5	....	15
Ontario :																
Males	....	1	11	7	3	7	....	5	3	....	7	2	32	....	1	7
Females	....	1	13	10	9	4	2	8	1	1	12	....	13	....	....	3
Total	....	2	24	17	12	11	2	13	4	1	19	2	45	....	1	10
Oxford :																
Males	....	2	18	5	4	4	....	4	1	....	5	....	26	1	2	8
Females	1	1	4	3	9	9	....	9	1	3	2	....	19	....	2	4
Total	1	3	22	8	13	13	....	13	2	3	7	....	45	1	4	12
Peel :																
Males	....	....	1	4	4	5	....	1	1	....	....	3	8	....	....	5
Females	....	....	9	4	2	....	....	3	....	....	2	1	4	....	1	1
Total	....	....	10	8	6	5	...	4	1	...	2	4	12	...	1	6
Perth :																
Males	1	1	11	11	14	8	....	9	1	2	5	....	15	2	1	6
Females	....	1	10	7	13	4	2	12	....	....	13	....	13	....	1	4
Total	1	2	21	18	27	12	2	21	1	2	18	....	28	2	2	10

BY COUNTIES, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
6	.....	.....	.....	10	.....	15	7	3	6	23	242
4	.....	....	. ...	12	1	15	1	1	1	31	212
10	.. ..	.....	.....	22	1	30	8	4	7	54	454
20	. ..	. ....	6	30	.....	55	127	2	7	86	741
12	....	.....	3	36	12	64	95	1	6	79	751
32	.....	....	9	66	12	119	222	3	13	165	1492
4	.....	.....	.....	16	.....	7	12	1	1	11	127
2	.. ..	.....	.....	13	6	8	4	.....	.....	17	106
6		. ...	.....	29	6	15	16	1	1	28	233
1	.....	... .	.....	15	.....	20	12	1	2	26	206
1	.....	.....	.....	6	2	18	1	.....	1	14	188
2	... .	.....	.....	21	2	38	13	1	3	40	394
6	...	.....	.....	19	.....	46	19	2	9	41	402
2	.....	1	.....	6	6	40	2	.....	4	21	352
8	.....	1	...	25	6	86	21	2	13	62	754
9	.....	.....	...	22	.....	36	12	1	4	23	303
6	.....	.....	1	8	6	29	1	1	2	24	281
15	.....	.....	1	30	6	65	13	2	6	47	584
7	.....	1	.....	12	.....	21	4	1	5	29	287
3	....	1	...	16	4	26	.....	3	1	28	282
10	.....	2	.....	28	4	47	4	4	6	57	569
5	.....	.....	.....	10	.....	11	6	1	1	25	147
.....	.....	...	.....	4	1	22	....	.....	2	26	134
5	.....	.....	.....	14	1	33	6	1	3	51	281
3	.....	.....	.....	19	.....	23	5	3	2	40	290
2	.....	.....	1	16	4	23	.. ..	1	2	23	276
5	.....	.....	1	35	4	46	5	4	4	63	566

TABLE F.—CAUSES OF DEATH

COUNTIES.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Peterborough :										
Males	....	2	6	9	....	1	9	2	...	1
Females	....	3	3	8	....	2	13	2	1	....
Total	....	5	9	17	....	3	22	4	1	1
Prescott and Russell :										
Males	....	2	3	15	....	7	1	....	....	2
Females	....	...	4	19	....	7	10	1	3	3
Total	....	2	7	34	....	14	11	1	3	5
Prince Edward :										
Males	....	2	4	4	....	3	1	....	....	1
Females	....	....	....	8	1	..	1	1	1	1
Total	....	2	4	12	1	3	2	1	1	2
Renfrew :										
Males	....	5	3	22	....	8	1	1	....	3
Females	....	7	1	23	....	4	....	....	....	....
Total	....	12	4	45	....	12	1	1	....	3
Simcoe :										
Males	....	2	4	12	....	6	3	....	....	....
Females	....	6	3	19	....	10	3	1	6	....
Total	....	8	7	31	....	16	6	1	6	....
Stormont, Dundas and Glengarry :										
Males	....	1	....	30	...	12	....	1	....	1
Females	....	1	....	27	..	5	3	2	3	...
Total	....	2	....	57	....	17	3	3	3	1
Victoria :										
Males	....	....	....	2	....	1	2	1	....	....
Females	....	....	3	....	....	4	2	....	....	....
Total	....	....	3	2	....	5	4	1	....	....
Waterloo :										
Males	....	1	....	12	....	24	....	2	....	....
Females	....	....	....	9	....	8	1	2	....	....
Total	....	1	....	21	....	32	1	4	....	....
Welland :										
Males	...	1	3	2	1	2	2	....	....	
Females	....	....	4	3	....	....	....	....	5	....
Total	....	1	7	5	1	2	2	...	5	....

BY COUNTIES, 1881—*Continued.*

Miasmatic.									Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
3	8	2	....	2	2	4	3	3	1	.....	2	26	2	....	1	1	4
4	6	2	3	2	....	3	4	3	.....	.....	3	13	3	.....	1	1	2
7	14	4	2	4	2	7	7	6	1	.....	5	39	4	.....	2	2	6
....	2	3	1	....	....	2	1	4	1	.....	.....	16	4	.....	.....	3	3
....	3	....	....	....	....	3	..	2	1	.....	2	23	1	.....	.....	.....	2
....	5	3	1	....	....	5	1	6	2	.....	2	39	5	.....	.....	3	5
1	3	2	....	1	....	3	....	2	.....	....	.....	23	3	....	.....	4	6
....	1	1	...	2	1	1	4	....	....	.....	2	23	2	.....	.....	4	3
1	4	3	....	3	1	4	4	2	.....	.....	2	46	5	.....	....	8	9
3	10	2	1	1	1	3	....	...	1	1	....	17	5	.....	.....	1	3
2	2	1	....	....	1	5	2	1	2	1	2	25	1	.....	....	1	3
5	12	3	1	1	2	8	2	1	3	2	2	42	6	.....	.....	2	6
2	12	6	1	1	2	17	1	1	.....	1	6	21	3	.....	.....	3	8
1	15	6	.	4	1	5	1	1	5	1	4	37	.....	.....	2	5	3
3	27	12	1	5	3	22	2	2	5	2	10	58	3	.....	2	8	11
....	6	6	3	....	1	6	1	....	4	2	2	41	3	....	2	2	3
4	7	3	1	4	....	2	1	....	2	1	4	46	1	....	....	6	9
4	13	9	4	4	1	8	2	....	6	3	6	87	4	.....	2	8	12
....	3	6	3	1	1	2	....	....	.....	1	3	20	.....	.....	.....	2	3
2	1	1	2	1	1	3	2	....	1	.....	2	17	4	.....	.....	2	3
2	4	7	5	2	2	5	2	....	1	1	5	37	4	.....	.....	4	6
2	9	7	2	1	1	16	5	3	.....	.....	6	32	1	....	.....	5	8
3	7	6	....	1	2	20	1	5	2	.....	4	35	4	....	1	4	5
5	16	13	2	2	3	36	6	8	2	....	10	67	5	.....	1	9	13
....	7	12	...	....	....	3	....	3	14	2	2	14	3	1	2	1	7
3	3	8	....	1	....	7	1	1	29	1	4	29	3	.....	.....	...	7
3	10	20	....	1	....	10	1	4	43	3	6	43	6	1	2	1	14

TABLE F.—CAUSES OF DEATH

COUNTIES.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Diseases.	Congestion of Lungs.
Peterborough :																
Males	1	....	12	9	8	7	1	3	....	...	4	....	7	....	1	2
Females	....	....	5	10	2	4	1	3	....	....	1	....	6	....	....	4
Total	1	....	17	19	10	11	2	6	....	....	5	....	13	....	1	6
Prescott and Russell :																
Males	...	4	6	2	....	2	....	1	...	3	2	1	5	2	....	4
Females	...	6	3	1	6	1	....	4	....	....	2	1	6	1	..	1
Total	...	10	9	3	6	3	....	5	....	3	4	2	11	3	....	5
Prince Edward :																
Males	....	4	1	....	2	...	....	5	3	1	1	...	7	...	2	3
Females	....	4	2	2	3	1	....	1	...	....	1	....	4	1	..	1
Total	....	8	3	2	5	1	....	6	3	1	2	....	11	1	2	4
Renfrew :																
Males	1	6	4	2	7	3	2	4	....	....	3	....	7	2	1	2
Females	4	4	5	2	3	3	....	3	....	....	2	....	7	....	....	3
Total	5	10	9	4	10	6	2	7	....	....	5	..	14	2	1	5
Simcoe :																
Males	1	1	10	6	4	9	4	4	1	....	1	....	15	....	....	6
Females	3	3	11	9	6	5	....	2	...	1	2	....	7	....	3	4
Total	4	4	21	15	10	14	4	6	1	1	3	....	22	....	3	10
Stormont, Dundas and Glengarry :																
Males	....	2	12	3	5	12	1	8	1	1	1	1	22	2	2	6
Females	.	1	14	1	6	8	....	5	....	4	1	....	14	....	....	4
Total	...	3	26	4	11	20	1	13	1	5	2	1	36	2	2	10
Victoria :																
Males	....	4	6	1	6	10	1	2	1	....	3	....	12	4	1	1
Females	....	6	5	4	3	2	2	7	...	4	3	....	8	....	1	2
Total	...	10	11	5	9	12	3	9	1	4	6	....	20	4	2	3
Waterloo :																
Males	....	....	15	8	4	12	3	9	1	....	5	....	6	2	2	1
Females	....	3	13	8	7	6	4	15	....	5	9	2	9	2	....	2
Total	....	3	28	16	11	18	7	24	1	5	14	2	15	4	2	3
Welland :																
Males	....	..	8	3	6	4	....	4	1	2	4	1	7	1	2	6
Females	....	1	9	4	5	5	....	5	....	1	5	....	7	2	....	5
Total	...	1	17	7	11	9	...	9	1	3	9	1	14	3	2	11

BY COUNTIES, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
4	.....	.....	2	25	.....	18	5	.....	.....	29	232
2	.....	.....	2	12	1	14	.....	.....	1	18	166
6	.....	.....	4	37	1	32	5	.....	1	47	398
6	.....	.....	3	43	.....	17	5	.....	3	16	195
5	.....	.....	5	35	3	11	1	.....	.....	7	183
11	.....	.....	8	78	3	28	6	.....	3	23	378
1	.....	.....	.....	8	.....	14	1	2	.....	18	136
2	.....	.....	.....	5	3	16	.....	1	1	19	124
3	.....	.....	.....	13	3	30	1	3	1	37	260
2	.....	.....	.....	11	.....	15	6	.....	.....	15	185
1	.....	.....	.....	6	3	13	2	.....	1	10	156
3	.....	.....	.....	17	3	28	8	.....	1	25	341
5	.....	.....	3	25	.....	32	4	1	2	70	316
4	.....	.....	4	20	6	30	2	.....	1	45	307
9	.....	.....	7	45	6	62	6	1	3	115	623
2	.....	.....	1	20	.....	45	1	3	1	49	328
1	.....	.....	1	27	1	44	1	.....	1	38	304
3	.....	.....	2	47	1	89	2	3	2	87	632
2	.....	.....	.....	7	.....	12	11	2	1	20	158
3	.....	.....	.....	11	3	19	3	.....	.....	19	156
5	.....	.....	.....	18	3	31	14	2	1	39	314
7	.....	.....	3	17	.....	22	7	1	4	48	314
4	.....	.....	4	16	3	28	1	1	3	17	282
11	.....	.....	7	33	3	50	8	2	7	65	596
5	.....	.....	.....	4	.....	15	12	1	1	24	193
5	.....	1	1	10	3	18	1	1	.....	17	215
10	.....	1	1	14	3	33	13	2	1	41	408

TABLE F.—CAUSES OF DEATH

COUNTIES.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Wellington:										
Males	....	....	6	22	1	13	4	2	....	....
Females	....	....	6	28	....	11	5	3	2	....
Total	....	....	12	50	1	24	9	5	2	....
Wentworth:										
Males	1	....	5	11	1	21	2	1	....	....
Females	....	1	2	16	....	16	7	1	11	....
Total	1	1	7	27	1	37	9	2	11	....
York:										
Males	....	7	4	34	1	28	14	9	....	4
Females	....	5	2	44	....	22	9	8	19	....
Total	....	12	6	78	1	50	23	17	19	4
Total Males	4	70	118	567	5	300	108	59	....	29
Total Females	1	78	106	604	2	233	162	58	127	24
Total	5	148	224	1171	7	533	270	117	127	53

BY COUNTIES, 1881—*Concluded.*

	Miasmatic.									Tubercular.				Nervous System.			
	Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
1		12	3	4	2	1	18	3	3	12	2	5	45	2	....	4	6	9
2		16	4	..	2	2	7	6	2	4	1	11	34	1	.....	.....	8	9
3		28	7	4	4	3	25	9	5	16	3	16	79	3	.....	4	14	18
4		25	18	4	1	4	15	1	1	17	1	5	59	.....	1	4	10	19
1		28	7	1	3	8	18	8	3	13	1	11	60	2	.....	1	12	9
5		53	25	5	4	12	33	9	4	30	2	16	119	2	1	5	22	28
7		64	41	3	13	3	36	6	3	18	2	16	102	17	.....	4	23	29
7		76	37	1	7	2	31	3	2	12	1	22	117	12	1	2	22	26
14		140	78	4	20	5	67	9	5	30	3	38	219	29	1	6	45	55
98		433	227	61	50	33	343	68	86	234	19	131	1059	116	3	31	152	233
98		385	176	34	61	43	273	84	91	236	15	182	1338	95	1	28	145	195
196		818	403	95	111	76	616	152	177	470	34	313	2397	211	4	59	297	428

TABLE F.—CAUSES OF DEATH

COUNTIES.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Wellington:																
Males	....	6	18	8	4	19	4	5	1	1	6	1	22	2	1	7
Females	1	10	18	6	11	10	2	6	...	2	5	2	14	1	1	6
Total	1	16	36	14	15	29	6	11	1	3	11	3	36	3	2	13
Wentworth:																
Males	4	4	24	16	12	26	12	8	1	1	15	1	36	5	2	16
Females	2	1	29	11	11	28	7	6	....	3	12	....	25	....	3	11
Total	6	5	53	27	23	54	19	14	1	4	27	1	61	5	5	27
York:																
Males	2	3	57	52	38	35	14	12	7	2	41	2	64	4	8	31
Females	2	4	61	47	27	28	7	18	3	5	36	2	58	3	8	23
Total	4	7	118	99	65	63	21	30	10	7	77	4	122	7	16	54
Total Males	14	53	462	258	266	264	65	203	42	29	218	22	641	54	55	218
Total Females	15	60	424	251	248	201	47	244	6	37	197	16	496	29	48	170
Total	29	113	886	509	514	465	112	447	48	66	415	38	1137	83	103	388

BY COUNTIES, 1881—*Concluded.*

Developmental Diseases of Children.					Develop-mental Diseases of Women.	Develop-mental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
11	.....	.....	3	17	.....	25	8	3	3	56	411
4	.....	1	1	21	2	35	1	1	5	51	381
15	.. . .	1	4	38	2	60	9	4	8	107	792
42	.....	.....	1	37	.....	19	13	1	3	58	588
33	.....	1	2	31	3	35	1	.....	8	57	560
75	....	1	3	68	3	54	14	1	11	115	1148
65	3	2	6	98	.....	62	24	10	15	170	1515
54	3	3	3	74	12	81	6	14	18	111	1001
119	6	5	9	172	12	143	30	24	33	281	2516
285	7	5	69	829	... .	931	503	67	102	1526	11825
193	9	11	62	652	158	986	160	37	89	1275	10996
478	16	16	131	1481	158	1917	663	104	191	2801	22821

TABLE G.—DEATHS

COUNTIES.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Algoma :											
Males	15	1	3	1	2	3	1	1	2	...	.....
Females	19	7	6	3	1	.....	....	.....	1	1	.....
Total	34	8	9	4	3	3	1	1	3	1	.....
Brant :											
Males	55	16	7	6	3	2	1	2	3	2	3
Females	46	23	10	11	3	4	3	4	2	3	.....
Total	101	39	17	17	6	6	4	6	5	5	3
Bruce :											
Males	75	22	14	7	3	4	.....	2	2	.....	2
Females	50	16	10	10	9	4	3	2	2	.....	2
Total	125	38	24	17	12	8	3	4	4	.....	4
Carleton :											
Males	237	54	17	18	16	9	5	5	3	3	3
Females	185	54	14	14	13	8	9	4	4	4	2
Total	422	108	31	32	29	17	14	9	7	7	5
Dufferin :											
Males	29	6	2	3	2	4	2	3	1	.....	....
Females	11	4	1	.....	1	1	.....	.....	.....	1	.....
Total	40	10	3	3	3	5	2	3	1	1	.....
Elgin :											
Males	46	10	9	4	2	1	3	.....	3	1	4
Females	30	7	8	11	3	1	5	1	1	4	....
Total	76	17	17	15	5	2	8	1	4	5	4
Essex :											
Males	123	49	11	10	11	6	6	6	2	5	4
Females	118	26	26	12	8	6	4	5	5	8	2
Total	241	75	37	22	19	12	10	11	7	13	6
Frontenac :											
Males	65	16	9	10	4	3	2	4	2	2	1
Females	51	14	5	3	2	3	1	2	5	.....	2
Total	116	30	14	13	6	6	3	6	7	2	3
Grey :											
Males	52	13	5	7	5	1	6	2	4	3	1
Females	57	20	6	4	6	9	2	5	1	.....	3
Total	109	33	11	11	11	10	8	7	5	3	4
Haldimand :											
Males	38	6	5	3	2	2	3	3	2	4	2
Females	22	9	3	8	2	2	2	1	4	.....	.....
Total	60	15	8	11	4	4	5	4	6	4	2
Halton :											
Males	26	9	5	6	1	6	2	2	1	2	2
Females	17	5	4	3	2	1	1	2	....	.....	....
Total	43	14	9	9	3	7	3	4	1	2	2

BY AGES, 1881.

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....
1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....
1	.....	1	.....	.....	.....	.....		1	.....	1	1	2	.....	.....
1	.....	1	1	.....	1	.....	1	7	1	1	1	4	1	.....
.....	.....	2	2	2	2	2	.....	.....	.....	2	2	4	1	4
1	.....	3	3	2	3	2	1	7	1	3	3	8	2	4
1	1	1	2	2	1	1	4	1	.....	3	.....	6	.....	4
2	2	1	.....	3	1	1	1	4	3	1	8	2	3	9
3	3	2	2	5	2	2	5	5	3	4	8	8	3	13
1	4	1	.....	4	2	2	2	4	4	3	5	2	2	4
2	4	5	1	1	4	6	7	9	3	2	7	7	6	3
3	8	6	1	5	6	8	9	13	7	5	12	9	8	7
2	.....	.....	2	1	.....	2	1	.....	.....	.....	.....	1	.....	.....
.....	.....	.....	.....	1	.....	3	1	.....	.....	1	.....	2	.....	.....
2	.....	.....	2	2	.....	5	2	.....	.....	1	.....	3	.....	.....
1	1	1	3	1	.....	3	2	2	1	.....	.....	2	1	.....
1	4	2	.....	.....	.....	1	3	2	1	3	1	3	3	1
2	5	3	3	1	.....	4	5	4	2	3	1	5	4	1
1	3	4	6	5	2	2	3	5	3	3	5	5	4	1
1	2	2	2	1	5	1	3	2	3	9	4	7	3	5
2	5	6	8	6	7	3	6	7	6	12	9	12	7	6
2	4	.....	2	1	3	3	.....	3	3	2	3	4	5	2
2	1	2	.....	3	2	2	1	3	2	2	3	3	3	6
4	5	2	2	4	5	5	1	6	5	4	6	7	8	8
1	1	.....	2	.....	1	1	2	2	3	3	1	.....	1	1
1	1	4	3	1	1	5	5	4	3	5	1	1	1	1
2	2	4	5	1	2	6	7	6	6	8	2	1	2	2
.....	.....	1	1	.....	1	1	2	1	3	1	1	2	1	3
2	.....	.....	2	.....	.....	1	2	1	1	1	.....	1	2	1
2	.....	1	3	.....	1	2	4	2	4	2	1	3	3	4
1	1	.....	1	1	1	.....	1	.....	2	1	3	.....	1	1
1	2	.....	1	1	.....	3	3	2	2	2	1	3	1	1
2	3	.....	2	2	1	3	4	2	4	3	4	3	2	2

TABLE G.—DEATHS

COUNTIES.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Algoma:											
Males	3				1	1					
Females	1		1		1						
Total	4		1		2	1					
Brant:											
Males	1	2			1	1	1	1		2	1
Females	4	1	2	1	2	2			1	4	2
Total	5	3	2	1	3	3	1	1	1	6	3
Bruce:											
Males	1	2		1	2	2	2	2	1		2
Females	2	2	2	3	1	1	6	2		4	4
Total	3	4	2	4	3	3	8	4	1	4	6
Carleton:											
Males	6	4	4	1	5	1	1	3	5	1	1
Females	3	2	2	1	5	6	5	2	2	7	5
Total	9	6	6	2	10	7	6	5	7	8	6
Dufferin:											
Males			2	2	1		1	2			1
Females		1				1		1			1
Total		1	2	2	1	1	1	3			2
Elgin:											
Males	1		1			2	1	1	3	2	
Females	2	4	2	1	1	1	1	3		1	
Total	3	4	3	1	1	3	2	4	3	3	
Essex:											
Males	3	3	1		3	1	2	1	2	1	6
Females	2	2	4	3	4	3	8	3	6	1	4
Total	5	5	5	3	7	4	10	4	8	2	10
Frontenac:											
Males	5	1	1	2	1	1	1	2		2	
Females	3	3	3	2	4	2	1	3		4	
Total	8	4	4	4	5	3	2	5		6	
Grey:											
Males	4		2	1		3	2	1	1	1	
Females	4	4	3	1	2	5		1	2	2	2
Total	8	4	5	2	2	8	2	2	3	3	2
Haldimand:											
Males	1	1									1
Females	1			1	1			2	1	1	
Total	2	1		1	1			2	1	1	1
Halton:											
Males	1			1	1				1		
Females	3	3		1		2	2	1	1	1	1
Total	4	3		2	1	2	2	1	2	1	1

BY AGES, 1881.—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
.....	1	.....	... .	.....	.....	1	2	....	1	1	....	.....	2	.....
1	.....	.....	.....	1	.....	.....	....	.....	.....	.....	1	.....	....	1
1	1	.....	.....	1	.....	1	2	.....	1	1	1	.....	2	1
....	2	1	.....	....	.....	3	1	....	2	.....	1	.....	2	.....
2	3	2	6	3	2	2	.....	1	1	....	4	....	.... .	1
2	5	3	6	3	2	5	1	1	3	.....	5	.....	2	1
3	3	.....	.....	2	2	1	3	....	...	. ....	.....	2	.....	2
2	.....	2	5	3	2	.....	3	4	1	1	2	1	...	1
5	3	2	5	5	4	1	6	4	1	1	2	3	.... .	3
4	3	3	3	1	7	2	3	4	3	4	9	2	6	3
4	3	3	3	1	1	1	1	3	.....	2	2	1	1	2
8	6	6	6	2	8	3	4	7	3	6	11	3	7	5
...	.....	1	.....	.....	.....	.....	.....	.....	1	....	.....	.....	....	1
1	1	1	.....	. ..	.....	1	1	1	1	1	.....	.....	....	.....
1	1	2	.....	....	.....	. 1	1	1	2	1	.....	.....	.....	1
.....	1	3	1	2	1	1	1	2	1	.....	1	2	1	.....
2	2	.....	.....	1	1	1	....	1	2	.....	3	.....	4	.....
2	3	3	1	3	2	2	1	3	3	.. ..	4	2	5	.....
4	3	2	4	1	2	2	1	1	2	2	2	2	4	1
.....	3	2	4	.....	6	.....	2	2	1	4	2	6	1	1
4	6	4	8	1	8	2	3	3	3	6	4	8	5	2
1	1	.....	1	.....	5	.....	2	2	....	.....	1	1	5	2
2	4	2	3	1	2	3	3	4	4	3	2	3	6	1
3	5	2	4	1	7	3	5	6	4	3	3	4	11	3
.....	.....	2	.....	.....	.....	1	.....	1	1	.....	.....	1	1	.....
1	3	5	4	1	2	1	1	1	1	1	1	....	1	.....
1	3	7	4	1	2	2	1	2	2	1	1	1	2	.....
1	....	.....	1	.....	.. .	.....	.....	1	.....	1	.....	1	1	1
1	2	3	.....	2	1	.....	....	1	.....	. ....	.....	1	.....	.....
2	2	3	1	2	1	.....	.....	2	... .	1	.....	2	1	1
1	3	2	1	.....	3	1	.....	1	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	2	.....	1	.....	1	.....	1	.....	.....	2	2
2	3	2	1	2	3	2	.... .	2	.. .	1	.....	.....	2	2

TABLE G.—DEATHS

COUNTIES.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Algoma:											
Males		1				2			1	1	
Females	1	1		1			1				
Total	1	2		1		2	1		1	1	
Brant:											
Males	2	2		1	2		2	1	1	3	7
Females	2	2			1	1	1		1	2	3
Total	4	4		1	3	1	3	1	2	5	10
Bruce:											
Males	3	3	2		1	2	1		1	1	3
Females	1	1	3	4		3	3		1		3
Total	4	4	5	4	1	5	4		2	1	6
Carleton:											
Males	2		1	1	4	3	3	3	2	5	5
Females	3	1		4	3	3	4		6	1	
Total	5	1	1	5	7	6	7	3	8	6	5
Dufferin:											
Males	1	2			1	2	1		3	2	
Females							1	2	1		2
Total	1	2			1	2	2	2	4	2	2
Elgin:											
Males			2		1	1	4	1	1	1	1
Females	1	2	1	1	1	1	1	2	1	2	3
Total	1	2	3	1	2	2	5	3	2	3	4
Essex:											
Males		2	1	2	3		3		3	1	5
Females	1	1	2		1		2	1			1
Total	1	3	3	2	4		5	1	3	1	6
Frontenac:											
Males	1		3	1	4	1	3	1	3	3	1
Females		1		2	3	1	2		2	2	1
Total	1	1	3	3	7	2	5	1	5	5	2
Grey:											
Males	1	1	2	1	1	1	1		1	2	3
Females	2	1	1	2		1	1	1	3		1
Total	3	2	3	3	1	2	2	1	4	2	4
Haldimand:											
Males		2	3	2	2	1	1	2	1	2	
Females		1	1			2	1	2	1		
Total		3	4	2	2	3	2	4	2	2	
Halton:											
Males		1		2		1	2	1	1		1
Females					1	1	1	1	1		1
Total		1		2	1	2	3	2	2		2

BY AGES, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
1	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1
1	.....	3	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	1
2	2	4	1	1	2	1	1	.....	1	1	4	3	2	1
1	4	4	1	2	.....	.....	.....	2	3	2	3	3	1	1
3	6	8	2	3	2	1	1	2	4	3	7	6	3	2
2	4	2	2	4	2	4	2	2	3	.....	1	3	1	3
1	.....	2	1	2	.....	.....	1	2	2	2	3	7	3	.....
3	4	4	3	6	2	4	3	4	5	2	4	10	4	3
.....	1	4	6	1	4	5	3	1	5	1	.....	5	4	2
1	4	4	1	5	4	1	5	2	4	1	2	1	3	.....
1	5	8	7	6	8	6	8	3	9	2	2	6	7	2
.....	.....	.....	.....	1	.....	.....	1	1	1	.....	1	.....	3	.....
1	1	1	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	1
1	1	1	.....	1	.....	.....	1	1	3	1	1	.....	3	1
1	.....	2	2	5	.....	1	3	.....	.....	1	1	.....	1	2
.....	1	2	2	.....	1	3	.....	.....	3	.....	2	.....	1	2
1	1	4	4	5	1	4	3	.....	3	1	3	.....	2	4
2	3	5	2	.....	.....	3	3	4	1	1	3	.....	1	1
.....	2	3	3	.....	1	1	3	.....	4	2	4	2	1	2
2	5	8	5	.....	1	4	6	4	5	3	7	2	2	3
5	2	2	2	3	2	3	6	1	3	4	2	1	3	4
.....	.....	2	2	2	3	1	7	2	5	5	3	3	5	4
5	2	4	4	5	5	4	13	3	8	9	5	4	8	8
.....	2	2	3	4	2	2	2	1	5	2	2	5	2	1
1	2	5	1	2	...	.....	3	2	1	2	.....	5	3	1
1	4	7	4	6	2	2	5	3	6	4	2	10	5	2
2	1	1	1	.....	1	2	.....	1	2	2	4	5	1	.....
.....	.....	2	1	.....	2	3	1	2	.....	2	1	1	1	.....
2	1	3	2	.....	3	5	1	3	2	4	5	6	2	.....
3	1	1	2	5	2	2	1	2	.....	.....	2	1	2	2
1	2	.....	1	3	.....	.....	.....	1	1	2	.....	2	3	2
4	3	1	3	8	2	2	1	3	1	2	2	3	5	4

TABLE G.—DEATHS

COUNTIES.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Algoma :											
Males											
Females			1			1					
Total			1			1					
Brant :											
Males	2	1	6	2			3	1	1		1
Females			2				1		2	1	1
Total	2	1	8	2			4	1	3	1	2
Bruce :											
Males	4	1	2	2	1	4	3	1		2	1
Females	1	2	2	2	2		3		2		
Total	5	3	4	4	3	4	6	1	2	2	1
Carleton :											
Males	2	4	5	2	1	3	1	2	1		5
Females		3	5	3		4	1	2	1	4	2
Total	2	7	10	5	1	7	2	4	2	4	7
Dufferin :											
Males	3	1	2		1			1	1	2	2
Females			1							1	1
Total	3	1	3		1			1	1	3	3
Elgin :											
Males	1	1	3	2	1	1	2			1	1
Females		2	1	1	1	1	1	2	1	3	1
Total	1	3	4	3	2	2	3	2	1	4	2
Essex :											
Males	3	3	2	3	3		1	1	3	2	
Females	5	2	3		3	1	2	1	1		
Total	8	5	5	3	6	1	3	2	4	2	
Frontenac :											
Males	1	1	7	4	3	3	3	1		2	3
Females	3	4	4	1	1	5	3	6	2	4	
Total	4	5	11	5	4	8	6	7	2	6	3
Grey :											
Males	1	1		1	3	4	1	2	3		2
Females	4	1	1	1	2	1		3			1
Total	5	2	1	2	5	5	1	5	3		3
Haldimand :											
Males	2	3		2			2		3	1	1
Females		2	1		1	1		1	1		
Total	2	5	1	2	1	1	2	1	4	1	1
Halton :											
Males	4	2	1	2		1	3		2	1	1
Females	1		3			1	2			1	
Total	5	2	4	2		2	5		2	2	1

BY AGES, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
.....	.....	.....	....	.....	.....	.....	....	...	.. ..	.....	....	.....	2	57
.....	.	....	.....	.....	.....	... .	.....	... .	.....	.....	....	.....	4	63
.....	....	....	.....	....	... ..	...	.....	.....	.....	.....	.....	.....	6	120
.. ..	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	213
.....	.....	....	....	..	.....	.....	.....	.....	..	.....	.....	.....	...	225
.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	438
1	1	.....	....	1	... ..	....	.....	.....	. ....	... .	.....	1	4	272
1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1	13	279
2	1	1	....	1	.....	.....	.. ...	.....	1	.....	.....	2	17	551
1	.....	1	1	2	....	1	.....	.....	....	.....	.....	.....	3	605
2	1	1	1	....	.....	1	1	.....	.....	.....	1	. ...	4	546
3	1	2	2	2	.....	2	1	.....	.....	.....	1	.....	7	1151
....	... ..	.. ...	.....	.....	.....	.....	1	.....	1	... ..	.....	1	.....	109
1	1	.....	.....	.....	.....	2	... ..	.....	1	..	.....	.....	5	65
1	1	.....	.. ...	.....	.....	2	1	.....	2	.....	....	1	5	174
2	2	2	.....	3	.....	.... .	.....	1	.... .	.....	.....	...	26	209
.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.. ...	.....	8	186
2	2	2	.... .	3	.... .	1	.....	1	1	.....	....	.....	34	395
1	.....	1	....	1	.....	.....	.....	.....	.....	.....	.....	.....	17	431
1	....	1	1	1	... .	1	.....	1	....	.....	.....	.....	6	411
2	.....	2	1	2	.....	1	.....	1	.....	.....	.....	.....	23	842
....	1	.....	... ..	.....	.....	2	.....	.....	.....	.....	.....	....	23	310
4	.....	.....	.. .	.. ...	1	1	.. ..	..	.....	....	.....	.....	7	295
4	1	.....	.....	.....	1	3	.....	.....	.....	.....	....	....	30	605
.....	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	6	217
....	2	.....	1	2	..	.... .	.....	1	.....	.....	.....	. ....	11	271
.....	3	1	1	3	.....	... .	.....	1	1	.....	.....	.....	17	488
	.. ..	1	.....	.....	.....	..	.....	.....	.....	.....	.....	.....	1	153
1	...	.....	1	...	... .	.....	.....	.....	.....	.....	.....	.....	2	120
1	.....	1	1	.....	.. ..	.....	.....	.... .	.....	.....	.....	.....	3	273
.....	.. ...	1	.....	.....	.....	....	....	.....	...	.....	.....	. ....	11	156
1	.....	.....	.....	.....	.....	.....	.....	...	1	.....	.....	. ....	1	118
1	....	1	.....	.....	.....	.....	.....	.....	1	... ..	.....	.....	12	274

TABLE G.—DEATHS

COUNTIES.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Hastings :											
Males	62	19	13	11	5	3	3	3	.....	.....	1
Females	55	16	6	11	3	7	3	7	2	3	1
Total	117	35	19	22	8	10	6	10	2	3	2
Huron :											
Males	91	30	16	13	10	10	7	5	3	2	1
Females	61	20	17	9	6	5	3	3	5	2	1
Total	152	50	33	22	16	15	10	8	8	4	2
Kent :											
Males	60	15	6	8	5	5	6	4	4	5	3
Females	57	22	7	3	6	2	3	3	3	2	2
Total	117	37	13	11	11	7	9	7	7	7	5
Lambton :											
Males	76	30	11	9	5	6	3	2	3	1	3
Females	46	13	15	7	8	5	4	2	4	3	.....
Total	122	43	26	16	13	11	7	4	7	4	3
Lanark :											
Males	26	6	3	5	3	3	1	1	4	.....	2
Females	16	6	4	.....	4	1	4	2	1	1	.....
Total	42	12	7	5	7	4	5	3	5	1	2
Leeds and Grenville :											
Males	58	16	10	4	3	6	4	1	2	3	.....
Females	46	17	14	6	1	6	6	2	.....	2	5
Total	104	33	24	10	4	12	10	3	2	5	5
Lennox and Addington :											
Males	29	6	5	4	3	2	.....	1	1	.....	.....
Females	27	6	5	5	2	5	.....	3	1	.....	.....
Total	56	12	10	9	5	7	.....	4	2	.....	.....
Lincoln :											
Males	50	13	6	4	3	3	1	2	1	2	1
Females	47	15	4	6	5	2	2	5	4	1	2
Total	97	28	10	10	8	5	3	7	5	3	3
Middlesex :											
Males	152	32	23	17	7	13	10	17	12	5	8
Females	137	42	24	20	9	10	11	6	9	3	4
Total	289	74	47	37	16	23	21	23	21	8	12
Muskoka and Parry Sound :											
Males	31	11	3	3	4	2	2	1	1	1	.....
Females	30	3	3	5	1	1	.....	1	1	2	.....
Total	61	14	6	8	5	3	2	2	2	3	.....
Norfolk :											
Males	52	12	7	1	5	4	.....	.....	.....	2	1
Females	24	8	6	5	6	2	.....	.....	1	1	.....
Total	76	20	13	6	11	6	.....	.....	1	3	1

BY AGES, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
.....	2	3	6	.....	1	1	4	5	2	2	3	6	5	2
1	2	2	1	4	3	3	6	7	4	5	3	3	4	4
1	4	5	7	4	4	4	10	12	6	7	6	9	9	6
.. ..	3	1	1	2	3	3	1	1	3	6	5	2	.....	4
1	1	.....	.....	4	3	1	5	1	4	6	5	6	6	2
1	4	1	1	6	6	4	6	2	7	12	10	8	6	6
3	4	3	2	5	2	2	7	2	.....	2	3	1	5	4
3	2	5	1	1	9	3	8	3	2	3	3	5	4	3
6	6	8	3	6	11	5	15	5	2	5	6	6	9	7
2	1	3	1	1	3	1	1	1	4	1	3	.....	2	3
2	2	1	2	.....	2	1	1	7	2	4	5	2	3	2
4	3	4	3	1	5	2	2	8	6	5	8	2	5	5
1	.....	1	.....	.....	3	1	1	3	2	2	1	4	... ..	1
.....	.....	3	... ..	2	1	1	3	1	1	.. ...	3	2	1	2
1	... .	4	.....	2	4	2	4	4	3	2	4	6	1	3
2	3	2	4	1	4	4	1	3	2	2	2	3	3	3
2	1	.....	1	1	1	.....	2	2	5	1	3	.....	2	4
4	4	2	5	2	5	4	3	5	7	3	5	3	5	7
1	1	2	1	1	.....	1	.....	1	3	2	1	2	3	....
4	2	.....	1	1	1	1	2	2	.....	....	1	.....	1	.....
5	3	2	2	2	1	2	2	3	3	2	2	2	4	... .
1	2	3	1	1	.....	1	1	.....	.....	5	5	1	3	1
1	.....	2	2	2	2	3	2	2	7	1	1	4	2	1
2	2	5	3	3	2	4	3	2	7	6	6	5	5	2
10	10	7	12	6	10	16	1	3	7	8	5	7	10	9
4	5	7	9	11	8	13	9	8	8	13	8	4	13	6
14	15	14	21	17	18	29	10	11	15	21	13	11	23	15
1	.....	... .	3	1	3	.....	.....	3	3	1	2	1	.....	.....
.....	1	.....	3	. ...	1	..	1	1	1	.....	1	1	4	2
1	1	.....	6	1	4	.. ..	1	4	4	1	3	2	4	2
.....	3	2	1	4	2	1	.....	1	1	3	1	1	2	1
3	4	1	2	3	2	.....	2	5	5	2	3	3	5	1
3	7	3	3	7	4	1	2	6	6	5	4	4	7	2

TABLE G.—DEATHS

COUNTIES.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Hastings :											
Males	3	2	1	1	1	1	6	2	1	2	3
Females	2	4	2	5	6	.....	1	4	2	2	1
Total	5	6	3	6	7	1	7	6	3	4	4
Huron :											
Males	6	1	3	.....	3	2	2	3	3	2	2
Females	4	6	6	5	5	4	2	4	3	5	2
Total	10	7	9	5	8	6	4	7	6	7	4
Kent :											
Males	1	2	2	3	1	2	.....	.....	....	2	3
Females	5	1	4	.....	4	1	2	2	3	1	2
Total	6	3	6	3	5	3	2	2	3	3	5
Lambton :											
Males	1	2	5	2	6	.....	1	2	1	2	2
Females	3	3	1	6	3	4	.....	1	3	2	3
Total	4	5	6	8	9	4	1	3	4	4	5
Lanark :											
Males	....	.....	.....	1	.....	.....	.	. .	1	.....	.....
Females	2	2	1	.....	1	1	2	.....	1	.....	1
Total	2	2	1	1	1	1	2	.....	2	.....	1
Leeds and Grenville :											
Males	3	3	3	2	3	.....	4	3	2	3	4
Females	4	4	1	2	4	2	2	1	4	5	1
Total	7	7	4	4	7	2	6	4	6	8	5
Lennox and Addington :											
Males	1	.....	2	2	.....	1	.. .	....	1	1	2
Females	.....	1	1	1	1	.....	. ....	2	1	.....	1
Total	1	1	3	3	1	1	.... .	2	2	1	3
Lincoln :											
Males	3	1	2	.....	1	.....	2	4	.....	1	2
Females	4	3	.....	3	1	2	1	1	....	.....	3
Total	7	4	2	3	2	2	3	5	.....	1	5
Middlesex :											
Males	6	4	2	6	2	2	6	4	3	3	4
Females	14	7	9	9	7	7	5	7	6	9	7
Total	20	11	11	15	9	9	11	11	9	12	11
Muskoka and Parry Sound :											
Males	1	2	.....	2	3	.....	3	1	1	1	1
Females	3	1	3	3	1	2	.....	1	.....	...	... .
Total	4	3	3	5	4	2	3	2	1	1	1
Norfolk :											
Males	.....	.. ..	.....	1	2	.....	2	.....	2	.....	1
Females	2	3	2	1	2	2	1	1	1	1	....
Total	2	3	2	2	4	2	3	1	3	1	1

BY AGES, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
2	.....	1	2	2	1	.....	3	5	3	1	1	.....	1	3
1	.....	1	7	2	3	3	3	2	3	1	1	.....	1	2
3	.....	2	9	4	4	3	6	7	6	2	2	.....	2	5
.....	1	1	3	3	.....	3	3	.....	1	.....	1	2	2	2
2	3	4	5	1	2	2	.....	4	2	.....	3	3	4	2
2	4	5	8	4	2	5	3	4	3	.....	4	5	6	4
2	4	1	6	2	3	2	.....	1	3	.....	5	1	1	1
2	1	4	6	1	1	2	1	3	.....	.....	2	1	.....	.....
4	5	5	12	3	4	4	1	4	3	.....	7	2	1	1
.....	3	2	2	.....	1	.....	2	3	2	3	1	4	1	1
2	.....	1	4	3	3	1	1	1	1	3	3	2	3	1
2	3	3	6	3	4	1	3	4	3	6	4	6	4	2
.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1	2	.....
.....	.....	2	.....	1	.....	.....	.....	2	1	.....	2	1	2	2
.....	1	2	1	1	1	.....	.....	2	1	.....	2	2	4	2
3	.....	.....	4	1	2	2	1	3	2	.....	3	1	4	3
3	4	2	3	2	2	1	1	6	2	1	4	1	4	3
6	4	2	7	3	4	3	2	9	4	1	7	2	8	6
.....	.....	.....	1	2	1	.....	1	1	.....	1	.....	2	.....	.....
.....	1	3	.....	.....	.....	.....	2	1	2	1	1	1	1	.....
.....	1	3	1	2	1	.....	3	2	2	2	1	3	1	.....
2	1	2	1	.....	1	2	.....	5	1	1	3	4	1	3
1	.....	.....	1	2	1	.....	.....	3	1	.....	.....	3	.....	.....
3	1	2	2	2	2	2	.....	8	2	1	3	7	1	3
1	6	6	5	1	3	2	4	8	3	4	6	3	6	1
5	7	11	6	6	2	2	4	9	4	1	1	1	3	6
6	13	17	11	7	5	4	8	17	7	5	7	4	9	7
1	1	1	1	1	2	.....	.....	.....	.....	.....	3	.....	.....	.....
.....	.....	2	1	1	.....	1	1	.....	.....	.....	1	1	.....	1
1	1	3	2	2	2	1	1	.....	.....	.....	4	1	.....	1
.....	.....	1	1	.....	1	3	.....	2	.....	.....	2	1	4	2
1	4	.....	1	1	1	2	.....	.....	1	1	1	1	2	2
1	4	1	2	1	2	5	.....	2	1	1	3	2	6	4

TABLE G.—DEATHS

COUNTIES.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Hastings:											
Males	.....	3	3	1	6	1	1	1	3	.....	4
Females	2	.....	2	1	3	2	2	3	2	1	1
Total	2	3	5	2	9	3	3	4	5	1	5
Huron:											
Males	5	1	.....	2	1	2	2	2	4	3	3
Females	5	.....	2	.....	2	1	1	.....	4	1	3
Total	10	1	2	2	3	3	3	2	8	4	6
Kent:											
Males	4	1	1	3	.....	1	.....	1	3	2	3
Females	.....	2	1	.....	.....	1	.....	2	.....	.....	2
Total	4	3	2	3	....	2	...	3	3	2	5
Lambton:											
Males	3	2	1	7	2	.....	3	2	.....	3	3
Females	1	...	....	1	2	.....	1	1	2	.....	.....
Total	4	4	1	8	4	.....	4	3	2	2	3
Lanark:											
Males	2	3	2	1	.....	2	1	...	1	.....	1
Females	.....	...	1	...	1	1	1	1	1	....	1
Total	2	3	3	1	1	3	2	1	2	.....	2
Leeds and Grenville:											
Males	3	.....	1	4	2	3	.....	3	5	1	7
Females	1	4	1	1	3	.....	4	1	4	.....	2
Total	4	4	2	5	5	3	4	4	9	1	9
Lennox and Addington:											
Males	.....	.....	1	2	1	1	2	.....	2	1	.....
Females	1	2	2	.....	1	4	.....	.....	5	.....	3
Total	1	2	3	2	2	5	2	.....	7	1	3
Lincoln:											
Males	1	2	1	3	3	2	3	2	2	2	2
Females	1	2	.....	2	...	2	.....	1	2	5	1
Total	2	4	1	5	3	4	3	3	4	7	3
Middlesex:											
Males	2	2	7	5	5	7	2	1	6	3	8
Females	7	3	2	5	3	2	6	7	5	2	3
Total	9	5	9	10	8	9	8	8	11	5	11
Muskoka and Parry Sound:											
Males	1	.....	2	.....	.....	1	.....	1	1	...	.....
Females	1	.....	.....	2	.....	...	.....	.....	1	2	1
Total	2	.....	2	2	.....	1	.....	1	2	2	1
Norfolk:											
Males	1	2	...	1	1	1	.....	2	1	3	4
Females	1	3	1	.....	1	3	.....	1	1	1	1
Total	2	5	1	1	2	4	.....	3	2	4	5

BY AGES, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
2	1	2	4	5	3	3	3	2	1	3	2	4	7	4
2	1	1	3	3	1	2	1	1	6	2	.....	1	4	5
4	2	3	7	8	4	5	4	3	7	5	2	5	11	9
1	5	5	1	1	2	3	6	2	6	3	2	6	4	2
2	2	2	2	2	6	2	4	1	6	2	.....	3	5	5
3	7	7	3	3	8	5	10	3	12	5	2	9	9	7
.....		3	3	1	3	.....	4	2	.....	1	2	4	3	2
2	.....	1	2	3	1	1	5	2	2	.....	.....	4	1	.....
2	.....	4	5	4	4	1	9	4	2	1	2	8	4	2
6	2	2	.....	.....	1	.....	1	1	1	1	1	3	4	2
2	1	1	1	.....	2	4	2	.....	1	1	3	2	1	1
8	3	3	1	.....	3	4	3	1	2	2	4	5	5	3
2	.....	1	.....	1	.....	2	6	1	1	2	4	1	2	2
2	1	2	.....	3	2	.....	5	.....	2	.....	1	2	1	1
4	1	3	.....	4	2	2	11	1	3	2	5	3	3	3
2	3	2	6	6	4	2	6	3	1	7	3	8	6	8
5	3	2	6	1	2	3	7	2	2	2	2	7	5	2
7	6	4	12	7	6	5	13	5	3	9	5	15	11	10
.....	2	4	1	1	3	1	3	.....	2	2	1	1	2	4
1	2	2	1	.....	.....	.....	.....	2	.....	2	.....	2	.....	1
1	4	6	2	1	3	1	3	2	2	4	1	3	2	5
1	1	1	2	6	2	4	4	2	1	2	2	4	3	1
.....	1	4	2	.....	2	1	1	1	2	2	2	4	.....	2
1	2	5	4	6	4	5	5	3	3	4	4	8	3	3
6	6	12	4	6	1	2	12	6	4	8	5	4	7	9
2	3	5	3	4	2	2	6	4	7	1	11	9	5	6
8	9	17	7	10	3	4	18	10	11	9	16	13	12	15
.....	.....	. ...	3	....	1	.....	1	.....	2	1	.....	.....	.....	.....
....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	....	....
.....	.... .	.....	4	.....	1	.....	2	.....	2	1	1	.....	.....	.....
2	2	4	4	.....	1	1	3	5	1	2	.....	3	....	2
.....	3	3	.....	1	1	1	1	1	2	1	3	.....	1	4
2	5	7	4	1	2	2	4	6	3	3	3	3	1	6

TABLE G.—DEATHS

COUNTIES.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Hastings:											
Males	5	4	3	2	3		3		4	1	1
Females	3	7	5	1	2	3		2	1		1
Total	8	11	8	3	5	3	3	2	5	1	2
Huron:											
Males	4	5	6	4	2	6	4	3	1	4	1
Females	7	1	2	5	2	1	5	3	2		2
Total	11	6	8	9	4	7	9	6	3	4	3
Kent:											
Males	4	1	2	3	2	1	2	2	1	2	1
Females	1	5	4	1					2		1
Total	5	6	6	4	2	1	2	2	3	2	2
Lambton:											
Males	2		2	3	3	1	1		1	1	1
Females	1	1	1	1			2				1
Total	3	1	3	4	3	1	3		1	1	2
Lanark:											
Males	2	1	1	5	1	3	3		1		1
Females	2	2	1	1	2	1	2	2		3	3
Total	4	3	2	6	3	4	5	2	1	3	4
Leeds and Grenville:											
Males	8	2	8	4	6	1	7	3	3	3	1
Females	7	6	5	1	1	3		2	1	1	2
Total	15	8	13	5	7	4	7	5	4	4	3
Lennox and Addington:											
Males	3	4	2	1	3	2	1		2	1	
Females	1		3	1	2	1					1
Total	4	4	5	2	5	3	1		2	1	1
Lincoln:											
Males	4	2	2	2	2	1	2			1	
Females			4	1	1	1	2				1
Total	4	2	6	3	3	2	4			1	1
Middlesex:											
Males	11		6	12	3	2	5	6	7	1	1
Females	5	8	6	3	4	6	6	4	2	2	1
Total	16	8	12	15	7	8	11	10	9	3	2
Muskoka and Parry Sound:											
Males			2		1		1			1	
Females		1		1		1	1	1	1	1	
Total		1	2	1	1	1	2	1	1	2	
Norfolk:											
Males	1	4	1	2	1	1	1	1	2	3	2
Females	2	5		2	1	1			4	2	
Total	3	9	1	4	2	2	1	1	6	5	2

BY AGES, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
. ....	1	1	.....	.....	1	1	1	1	....	.....	.....	.....	10	321
2	2	1	1	.....	.....	.....	2	... ..	.....	.....	.....	.. ..	7	317
2	3	2	1	....	1	1	3	1	.....	.....	....	.....	17	638
1	2	.....	.....	.....	.....	.....	.....	.....	.....	...	.....	1	11	401
1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.. ..	1	6	363
2	3	. ....	.....	.....	.....	.....	.. ..	1	.....	.....	.....	2	17	764
.....	.....	.....	1	1	.....	1	1	.....	.....	.....	.....	.....	13	299
....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....	16	280
.....	.. ..	.....	1	1	.....	3	1	.....	.....	.....	2	.....	29	579
.....	.....	.....	.....	.....	.....	.. ..	.....	.....	....	.....	....	1	3	295
....	.....	1	2	1	.....	.....	.....	.....	....	.....	.....	....	4	248
.....	.....	1	2	1	.....	.....	...	.....	.....	.....	.....	1	7	543
1	2	.....	.....	.....	.....	.....	1	.....	.....	. ...	.....	.....	.....	142
.....	1	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	1	136
1	3	.....	.....	1	.....	.....	3	.....	.....	.. ..	.....	.....	1	278
1	3	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	13	369
.....	.....	...	.....	2	.....	1	.....	1	.....	.....	.....	.....	17	321
1	3	.....	.....	5	....	3	.....	1	.....	.....	.....	.....	30	690
1	....	.....	.....	...	.....	.....	1	.....	.. ..	.....	.....	.....	3	150
1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	.....	135
2	.....	.....	.....	.....	1	.....	1	.....	. ...	1	1	.....	3	285
.....	.....	.....	.....	.....	.....	.....	.....	. ...	....	....	.....	.....	13	242
1	2	.....	.....	.....	.....	....	.....	1	.....	....	.....	..... .	3	212
1	2	.....	.....	.....	.....	.....	.....	1	....	.....	.....	.....	16	454
3	5	2	... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	741
1	3	1	....	.....	.....	.....	1	.....	.....	.....	1	1	25	751
4	8	3	.....	.....	.....	.....	1	.....	.....	.....	1	1	44	1492
.....	.....	....	1	.....	.. .	.....	.....	.....	.....	.....	.....	.....	5	127
....	....	.....	... ..	.....	.....	.....	.....	.....	.....	.....	.....	..	3	106
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	. ..	8	233
1	.....	1	1	.. .	1	1	.....	... ..	.....	....	.....	.....	4	206
1	....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	4	188
2	... .	1	2	.....	2	1	1	.....	.....	.....	.. ...	...	8	394

TABLE G.—DEATHS

COUNTIES.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Northumberland and Durham:											
Males	85	20	13	5	8	6	5	3	3	1	5
Females	63	12	7	6	6	5	1	.....	2	2	1
Total	148	32	20	11	14	11	6	3	5	3	6
Ontario:											
Males	73	14	5	6	5	3	2	2	4	2	1
Females	45	11	10	8	4	1	6	2	2	4	.....
Total	118	25	15	14	9	4	8	4	6	6	1
Oxford:											
Males	62	8	13	14	4	3	3	5	3	2	1
Females	52	13	10	6	3	7	6	6	4	.....	3
Total	114	21	23	20	7	10	9	11	7	2	4
Peel:											
Males	38	4	1	7	3	2	1	.....	2	.....	.....
Females	17	10	1	1	2	1	2	1	.....	.....	2
Total	55	14	2	8	5	3	3	1	2	....	2
Perth:											
Males	68	12	10	10	7	2	3	3	3	1	4
Females	59	15	8	8	9	4	4	3	3	2	3
Total	127	27	18	18	16	6	7	6	6	3	7
Peterborough:											
Males	75	12	8	3	5	3	4	2	1	1	.....
Females	57	11	9	5	4	2	.....	3	2	.....	.....
Total	132	23	17	8	9	5	4	5	3	1	.....
Prescott and Russell:											
Males	68	14	10	2	4	.....	1	1	3	2	.....
Females	54	24	13	9	1	3	4	2	.....	....	.....
Total	122	38	23	11	5	3	5	3	3	2	.....
Prince Edward:											
Males	23	7	.....	1	4	2	1	.....	2	.....	2
Females	14	4	1	5	3	5	.....	.....	2	1	2
Total	37	11	1	6	7	7	1	.....	4	1	4
Renfrew:											
Males	34	16	13	4	7	4	4	4	3	1	1
Females	24	13	6	1	6	4	2	2	2	.....	.....
Total	58	29	19	5	13	8	6	6	5	1	1
Simcoe:											
Males	76	17	7	.....	6	3	.....	4	2	2	1
Females	65	21	11	12	5	7	2	2	1	3	3
Total	141	38	18	12	11	10	2	6	3	5	4
Stormont, Dundas & Glengarry:											
Males	54	15	13	5	7	3	7	2	4	2	1
Females	53	15	12	8	6	5	5	4	2	3	1
Total	107	30	25	13	13	8	12	6	6	5	2

BY AGES, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
2	1	3	1	3	2	1	6	2	5	2	3	1	3	2
1	2	2	1	4	1	1	3	4	4	2	7	7	4	6
3	2	5	2	7	3	2	9	6	9	4	10	8	7	8
1	.....	5	.....	2	1	5	3	.....	.....	.....	3	3	1	2
2	.....	4	2	3	2	2	2	4	3	5	3	2	3	.....
3	.....	9	2	5	3	7	5	4	3	5	6	5	4	2
1	1	2	1	1	3	3	2	3	.....	4	1	2	4	2
1	1	1	3	3	2	1	1	.....	1	6	2	4	1	3
2	2	3	4	4	5	4	3	3	1	10	3	6	5	5
.....	1	.....	2	.....	.....	.....	2	2	2	2	1	2	3	.....
.....	.....	.....	.....	3	.....	2	2	3	2	1	2	1	5	1
.....	1	.....	2	3	.. .	2	4	5	4	3	3	3	8	1
4	.....	.....	1	.....	2	2	2	6	2	2	2	1	7	1
4	.....	....	.. .	4	.....	4	2	2	3	2	2	5	3	3
8	.....	.....	1	4	2	6	4	8	5	4	4	6	10	4
1	1	1	.....	.....	1	1	2	2	3	2	5	.....	3	2
1	3	2	1	.....	2	1	1	1	.....	2	.....	1	.....	2
2	4	3	1	.....	3	2	3	3	3	4	5	1	3	4
...	1	2	1	.....	2	1	....	2	1	.....	3	2	....	1
1	1	2	1	2	.....	1	.....	.....	3	3	.....	.....	2	2
1	2	4	2	2	2	2	.....	2	4	3	3	2	2	3
1	.....	....	1	2	1	1	1	1	2	2	1	.....	.....	.....
3	.....	1	.....	....	.....	2	.....	2	1	1	4	1	3	.....
4	.....	1	1	2	1	3	1	3	3	3	5	1	3	.....
. .	2	.....	1	4	3	5	.....	....	1	1	1	1	2	4
4	1	5	4	1	.....	.....	2	1	1	.....	.....	1	2	1
4	3	5	5	5	3	5	2	1	2	1	1	2	4	5
1	5	1	2	1	2	4	3	4	4	7	3	1	2	3
2	3	2	2	3	4	4	.....	9	2	3	3	6	.....	4
3	8	3	4	4	6	8	3	13	6	10	6	7	2	7
1	1	3	3	1	2	2	.....	1	3	.....	3	4	9	5
4	1	2	.....	3	5	1	2	1	3	4	2	1	1	3
5	2	5	3	4	7	3	2	2	6	4	5	5	10	8

TABLE G.—DEATHS

COUNTIES.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Northumberland and Durham:											
Males	2	3	4	2	5	2	3	2	.....	4	4
Females	4	9	3	5	6	1	2	1	.....	4	2
Total	6	12	7	7	11	3	5	3	.....	8	6
Ontario:											
Males	3	.....	.....	1	3	.....	.....	1	4	.....	1
Females	.....	3	4	1	.....	8	5	5	1	5	6
Total	3	3	4	2	3	8	5	6	5	5	7
Oxford:											
Males	1	4	5	4	.....	2	2	2	2	2	...
Females	6	1	1	2	2	.....	2	.....	4	6	1
Total	7	5	6	6	2	2	4	2	6	8	1
Peel:											
Males	3	1	.....	1	2	.....	.....	.....	2	2	.....
Females	2	1	2	1	1	....	1	.....	2	.....	2
Total	5	2	2	2	3	...	1	....	4	2	2
Perth:											
Males	2	3	.....	.....	2	2	2	1	2	.....	.....
Females	4	2	1	2	2	1	2	2	2	1	5
Total	6	5	1	2	4	3	4	3	4	1	5
Peterborough:											
Males	.....	.....	4	1	.....	1	2	1	.....	2	2
Females	2	1	1	1	2	.....	.....	.....	.....	2	.....
Total	2	1	5	2	2	1	2	1	.....	4	2
Prescott and Russell:											
Males	.....	4	2	.....	.....	2	.....	.....	1	.....	1
Females	1	2	1	1	3	....	2	2	.....	1	6
Total	1	6	3	1	3	2	2	2	1	1	7
Prince Edward:											
Males	3	2	1	1	2	.....	3	.....	1	2	2
Females	1	1	2	1	2	3	2	....	3	2	...
Total	4	3	3	2	4	3	5	.....	4	4	2
Renfrew:											
Males	3	3	2	.....	1	...	....	1	2	.....	...
Females	2	2	2	....	1	3	1	1	...	1	3
Total	5	5	4	.....	2	3	1	2	2	1	3
Simcoe:											
Males	4	4	5	1	2	1	2	3	1	1	2
Females	4	2	7	5	6	3	1	1	4	1	.....
Total	8	6	12	6	8	4	3	4	5	2	2
Stormont, Dundas & Glengarry:											
Males	2	4	3	1	1	3	4	2	2	2	2
Females	2	4	.....	4	4	1	.....	....	.....	4	.....
Total	4	8	3	5	5	4	4	2	2	6	2

BY AGES, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
4	3	1	4	3	1	1	4	1	1	4	4	4	1	1
6	2	.....	1	4	2	1	4	3	.....	6	1	2	4	2
10	5	1	5	7	3	2	8	4	1	10	5	6	5	3
2	2	1	4	.....	2	2	1	.....	.....	3	3	2	4	2
.....	2	1	4	2	3	3	1	2	.....	....	.. ..	2	3	... .
2	4	2	8	2	5	5	2	2	....	3	3	4	7	2
.....	2	2	....	.....	.....	3	3	2	1	1	1	1	1	1
4	2	3	.....	.....	.....	4	1	3	.....	2	3	2	1	1
4	4	5	3	....	.....	7	4	5	1	3	4	3	2	2
....	1	.....	1	.....	2	.....	1	. ....	1	2	1	2	1	1
.....	.....	4	.....	1	2	1	.....	2	.....	2	1	1	.....	1
.....	1	4	1	1	4	1	1	2	1	4	2	3	1	2
3	1	1	1	1	1	1	2	3	5	4	2	2	2	2
2	2	3	2	.....	4	2	1	2	2	2	.....	.....	1	1
5	3	4	3	1	5	3	3	5	7	6	2	2	3	3
3	1	1	.....	.....	1	.....	.....	2	3	1	3	1	1	... .
1	1	....	.....	.....	1	1	1	2	1	.....	....	.....	.....	1
4	2	1	.....	.....	2	1	1	4	4	1	3	1	1	1
....	.....	1	4	.....	.....	....	.....	.....	.....	.....	.....	1	.....	1
.....	.....	.. ..	.....	1	2	2	3	2	.....	.....	1	.....	1	1
.....	.....	1	4	1	2	2	3	2	....	.....	1	1	1	2
1	1	.....	2	1	4	...	.....	1	4	2	1	.....	2	2
.....	1	1	5	.....	2	.. ..	.....	1	1	.....	1	. ...	1	.....
1	2	1	7	1	6	.....	.....	2	5	2	2	.....	3	2
.....	.. ...	1	.....	...	.....	.....	2	1	.....	....	.....	.....	.....	.....
3	2	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	2	1
3	2	2	....	1	.....	.....	2	2	.....	1	.... .	.....	2	1
1	.....	1	1	. ...	2	2	2	3	2	1	1	5	1	3
1	.....	2	2	.....	1	.....	1	.....	.....	.....	.....	3	2	.. . ...
2	.....	3	3	.. ..	3	2	3	3	2	1	1	8	3	3
.....	1	2	1	1	6	2	2	5	2	.....	.... .	5	.... .	5
2	4	.....	1	2	1	1	2	3	... ..	1	1	.....	2	3
2	5	2	2	3	7	3	4	8	2	1	1	5	2	8

TABLE G.—DEATHS

COUNTIES.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Northumberland & Durham :											
Males	3	1	1	3	2	5	3	3	4	5	2
Females	4	3	....	1	3	2	1	2	1	5	4
Total	7	4	1	4	5	7	4	5	5	10	6
Ontario :											
Males	2	6	.....	1	1	2	2	2	2	3	7
Females	3	2	2	3	1	.. ..	2	1	1	1	2
Total	5	8	2	4	2	2	4	3	3	4	9
Oxford :											
Males	.....	2	5	2	2	2	3	.. .	2	2	1
Females	2	.....	2	2	1	1	4	2	1	1	....
Total	2	2	7	4	3	3	7	2	3	3	1
Peel :											
Males	.....	1	1	1	2	1	.. ..	1	1	.....	....
Females	.....	1	....	.....	.....	.....	1	1	1	.....	1
Total	....	2	1	1	2	1	1	2	2	....	1
Perth :											
Males	.....	2	3	.....	... ...	2	5	3	5	3	3
Females	3	1	2	3	2	1	1	1	5	1	2
Total	3	3	5	3	2	3	6	4	10	4	5
Peterborough :											
Males	.....	1	1	.....	6	1	1	.....	.....	.....	2
Females	2	.....	.....	.....	1	1	2	.....	3	.....	2
Total	2	1	1	....	7	2	3	.....	3	.....	4
Prescott and Russell :											
Males	1	1	.....	3	.....	1	2	.....	1	2	3
Females	.....	.....	1	.....	.....	.....	.....	1	2	.....	....
Total	1	1	1	3	.....	1	2	1	3	2	3
Prince Edward :											
Males	.....	1	2	1	2	1	... .	1	1	3	1
Females	.....	2	.....	1	....		1	.....	.....	2	....
Total	..	3	2	2	2	1	1	1	1	5	1
Renfrew :											
Males	.....	.....	.....	1	1	.....	1	1	2	.....	1
Females	1	... ..	.....	.....	.....	2	1	1	2	... .	1
Total	1	.....	.....	1	1	2	2 .	2	4	.....	2
Simcoe :											
Males	3	1	2	2	3	2	2	4	1	2	1
Females	2	1	2	2	2	.....	.....	1	4	.....	2
Total	5	2	4	4	5	2	2	5	5	2	3
Stormont, Dundas & Glengarry :											
Males	....	.....	1	4	.....	5	6	.....	3	2	1
Females	1	1	1	2	.....	3	3	1	1	1	2
Total	1	1	2	6	.....	8	9	1	4	3	3

BY AGES, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
3	1	7	1	.....	4	2	5	3	3	4	7	5	7	1
3	5	4	1	5	2	5	9	3	7	2	2	4	5	2
6	6	11	2	5	6	7	14	6	10	6	9	9	12	3
1	1	3	1	2	4	2	3	5	5	5	7	4	3	5
2	1	6	2	2	2	3	.	2	5	.....	5	5	2	1
3	2	9	3	4	6	5	3	7	10	5	12	9	5	6
2	2	4	4	2	3	3	2	2	2	2	2	1	6	3
4	2	4	3	1	3	2	2	1	2	4	2	4	7	3
6	4	8	7	3	6	5	4	3	4	6	4	5	13	6
.....	.....	1	...	4	.....	.....	3	2	1	.....	.....	5	.....	1
1	.....	2	2	1	1	.....	.....	....	3	2	2	2	.....	4
1	....	3	2	5	1	....	3	2	4	2	2	7	.....	5
2	2	6	2	1	1	3	3	2	3	3	3	2	3	3
.....	.....	1	.....	.....	5	2	4	1	1	1	2	4	3	1
2	2	7	2	1	6	5	7	3	4	4	5	6	6	4
3	2	2	1	1	....	.....	.....	.....	....	3	3	4	1	3
2	.....	.....	4	1	.....	.....	1	2	1	1	....	.....	1	2
5	2	2	5	2	.....	.....	1	2	1	4	3	4	2	5
1	1	4	.....	....	2	1	3	2	5	1	. ..	2	.....	3
.....	.....	1	..	2	.....	.....	2	.....	4	.....	.....	.....	.....	1
1	1	5	.....	2	2	1	5	2	9	1	.....	2	.....	4
3	.....	3	2	1	.....	1	1	1	1	.....	2	....	3	.....
2	.....	1	1	1	1	2	1	.....	.....	4	1	1	4	2
5	.....	4	3	2	1	3	2	1	1	4	3	1	7	2
1	2	2	1	.....	4	1	4	2	3	1	.....	2	1	1
2	.....	1	2	.....	.....	1	4	1	1	.....	3	... ..	2	1
3	2	3	3	.....	4	2	8	3	4	1	3	2	3	2
2	2	3	4	2	1	2	3	3	1	2	3	2	3	4
2	1	1	1	....	2	2	2	1	2	1	3	5	1	6
4	3	4	5	2	3	4	5	4	3	3	6	7	4	10
1	4	4	4	3	... .	1	1	2	4	1	10	3	3	1
1	1	1	2	4	2	1	1	2	1	3	4	2	3	3
2	5	5	6	7	2	2	2	4	5	4	14	5	6	4

TABLE G.—DEATHS

COUNTIES.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Northumberland & Durham :											
Males	3	3	6	9	4	3	5	1	1	3	.....
Females	2	1	1	5	1	3	.....	3	2	2	2
Total	5	4	7	14	5	6	5	4	3	5	2
Ontario :											
Males	5	2	3	4	.....	4	3	4	.....	1	1
Females	4	2	3	1	3	1	6	3	3	1	1
Total	9	4	6	5	3	5	9	7	3	2	2
Oxford :											
Males	3	1	3	3	2	2	2	2	1	2	.....
Females	2	4	6	1	.....	1	2	1	1	.....	.....
Total	5	5	9	4	2	3	4	3	2	2	.....
Peel :											
Males	3	.....	2	2	1	.....	2	1	.....	.....	.....
Females	3	1	2	1	.....	2	2	.....	1	2	.....
Total	6	1	4	3	1	2	4	1	1	2	.....
Perth :											
Males	2	2	3	1	1	3	.....	.....	1	1	1
Females	3	.....	1	3	1	4	2	1	3	3	.....
Total	5	2	4	4	2	7	2	1	4	4	1
Peterborough :											
Males	2	4	5	.....	.....	2	1	.....	.....	1	.....
Females	1	1	1	.....	3	1	.....	2	1	.....	.....
Total	3	5	6	.....	3	3	1	2	1	1	.....
Prescott and Russell :											
Males	.....	1	.....	2	.....	.....	.....	.....	4	.....	3
Females	1	.....	1	1	3	1	.....	.....	.....	.....	.....
Total	1	1	1	3	3	1	.....	.....	4	.....	3
Prince Edward :											
Males	.....	1	2	1	.....	2	1	1	1	.....	.....
Females	.....	1	2	.....	2	2	.....	3	.....	.....	.....
Total	.....	2	4	1	2	4	1	4	1	.....	.....
Renfrew :											
Males	.....	.....	2	.....	1	1	1	1	2	.....	1
Females	.....	1	1	1	1	.....	1	.....	1	.....	.....
Total	.....	1	3	1	2	1	2	1	3	.....	1
Simcoe :											
Males	2	2	3	2	1	2	4	1	3	2	1
Females	1	.....	6	1	.....	2	1	3	1	1	.....
Total	3	2	9	3	1	4	5	4	4	3	1
Stormont, Dundas & Glengarry:											
Males	4	3	4	1	3	2	2	5	5	2	1
Females	6	3	9	8	3	6	1	3	6	.....	.....
Total	10	6	13	9	6	8	3	8	11	2	1

BY AGES, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
.....	2	3	1	.....	1	1	.....	2	.....	.....	.....	2	8	402
.....	.....	1	...	3	.....	.....	.....	.....	1	1	.....	2	8	352
.....	2	4	1	3	1	1	.....	2	1	1	.....	4	16	754
1	1	.....	1	1	...	1	1	.....	.....	.....	.....	...	7	303
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	5	281
1	1	...	1	1	...	1	1	.....	.....	.....	...	1	12	584
1	1	.....	1	...	.....	.....	1	.....	.....	.....	.....	.....	11	287
1	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	5	282
2	4	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	16	569
.....	... ..	.....	.....	....	.... .	.....	.....	....	1	.....	.....	.....	11	147
.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	134
... ..	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	18	281
2	1	1	.....	1	.... .	1	.....	.....	1	.....	.....	... ..	3	290
.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	5	276
2	1	1	.....	2	.....	2	.....	.....	1	.....	.....	1	8	566
1	.....	.....	.....	...	....	.....	.....	.....	.....	.....	.....	.....	13	232
.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	166
1	.....	.....	...	1	.....	1	... ..	.....	.....	.....	.....	.....	13	398
.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	.. ...	1	3	195
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	183
.....	.....	2	.....	....	.....	2	1	... ..	.....	.....	.....	1	4	378
.....	.....	.....	.....	.....	.....	... ..	.....	.....	.....	.....	....	.....	3	136
... ..	.....	.....	...	.....	.....	.....	.....	.....	... ..	.....	.....	1	1	124
.....	.....	.....	.....	.....	.....	....	.. ..	.....	.....	.....	.....	1	4	260
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	10	185
.....	.....	.....	.....	.....	.....	.....	.. ..	1	.....	.....	.....	.....	12	156
.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1	22	341
.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	... .	2	17	316
.....	.....	1	....	1	...	.....	.....	1	.....	.....	.....	.....	17	307
.....	.. ...	1	1	1	1	.....	.....	1	....	.....	....	2	34	623
1	2	...	1	.....	1	1	2	.. .	.....	1	.....	... ..	14	328
1	1	1	....	.. ...	. ..	.....	.....	.....	1	.. ...	.... .	.....	19	304
2	3	1	1	.....	1	1	2	....	1	1	.....	.....	33	632

TABLE G.—DEATHS

COUNTIES.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Victoria:											
Males	30	3	6	2	.....	1	.....	3	1	.....	1
Females	36	4	4	2	2	2	2	2	1	3	....
Total	66	7	10	4	2	3	2	5	2	3	1
Waterloo:											
Males	75	28	5	14	10	6	6	6	4	1	3
Females	58	24	9	4	3	3	2	1	2	1	1
Total	133	52	14	18	13	9	8	7	6	2	4
Welland:											
Males	36	17	4	7	2	1	2	3	3	1	1
Females	38	7	10	7	7	4	1	5	3	3	2
Total	74	24	14	14	9	5	3	8	6	4	3
Wellington:											
Males	74	29	11	10	6	5	7	5	2	1	1
Females	66	23	12	9	4	5	8	2	5	2	3
Total	140	52	23	19	10	10	15	7	7	3	4
Wentworth:											
Males	182	40	11	11	11	7	5	8	3	1	3
Females	131	31	18	17	13	6	5	8	7	2	3
Total	313	71	29	28	24	13	10	16	10	3	6
York:											
Males	419	93	45	20	19	13	20	8	6	5	5
Females	326	91	35	26	16	15	10	10	5	5	3
Total	745	184	80	46	35	28	30	18	11	10	8
Total Males	2920	741	365	275	212	162	139	126	105	66	72
Total Females	2310	682	374	290	195	164	126	113	99	72	53
Grand Total	5230	1423	739	565	407	326	265	239	204	138	125

BY AGES, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
.....	.....	1	1	2	1	.....	.....	1	1	3	1	3	3	2
.....	.....	2	1	1	.....	. ..	1	.....	.....	1	1	3	2	1
.....	.....	3	2	3	1	.....	1	1	1	4	2	6	5	3
2	4	1	2	2	1	.....	3	2	2	1	1	3	3	2
1	1	4	2	1	1	3	3	4	4	2	4	2	3	... ...
3	5	5	4	3	2	3	6	6	6	3	5	5	6	2
1	2	1	1	1	3	2	3	3	.....	.....	2	.....	2	1
1	.....	.....	.....	2	1	1	4	2	4	3	2	1	1	....
2	2	1	1	3	4	3	7	5	4	3	4	1	3	1
3	3	2	3	4	1	1	2	2	3	7	2	4	5	5
1	3	3	... .	.....	1	6	5	2	6	5	6	3	5	4
4	6	5	3	4	2	7	7	4	9	12	8	7	10	9
. ....	5	2	2	5	4	2	3	4	6	2	4	5	5	6
.....	3	1	.....	2	4	2	2	3	4	10	5	4	4	6
.....	8	3	2	7	8	4	5	7	10	12	9	9	9	12
7	3	4	5	6	6	1	6	11	11	9	5	2	5	2
7	3	2	3	5	4	8	7	10	8	8	14	5	11	18
14	6	6	8	11	10	9	13	21	19	17	19	7	16	20
57	74	64	79	71	78	77	73	95	93	95	91	89	107	84
67	58	73	53	79	75	90	104	114	106	122	121	111	118	112
124	132	137	132	150	153	167	177	209	199	217	212	200	225	196

TABLE G.—DEATHS

COUNTIES.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Victoria:											
Males	1	.....	2	.....	1	1	1	3	1	.....	.....
Females	2	3	1	1	.....	2	1	3	2	1	1
Total	3	3	3	1	1	3	2	6	3	1	1
Waterloo:											
Males	5	5	3	2	.....	3	3	.....	.....	.....	2
Females	4	4	4	2	4	1	..	3	2	3	1
Total	9	9	7	4	4	4	3	3	2	3	3
Welland:											
Males	2	....	4	.....	1	1	1	1	.....	3	1
Females	5	4	3	.....	2	3	1	....	.....	2	1
Total	7	4	7	.....	3	4	2	1	.....	5	2
Wellington:											
Males	.....	5	8	.....	1	2	2	2	1	3	2
Females	5	3	1	3	2	3	5	4	5	3	2
Total	5	8	9	3	3	5	7	6	6	6	4
Wentworth:											
Males	5	5	4	4	1	3	7	2	2	4	3
Females	9	12	6	4	6	2	8	3	6	4	5
Total	14	17	10	8	7	5	15	5	8	8	8
York:											
Males	15	10	7	7	7	6	8	8	9	9	7
Females	7	12	16	9	8	11	7	12	11	14	14
Total	22	22	23	16	15	17	15	20	20	23	21
Total Males	102	83	85	53	66	49	77	61	58	60	65
Total Females	128	123	104	91	107	90	79	79	79	104	89
Grand Total	230	206	189	144	173	139	156	140	137	164	154

BY AGES, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
1	1	2	.....	2	5	.....	4	1	1	1	2	.....	1	.....
2	5	.....	2	1	....	.....	2	1	....	.....	2	2	1	.....
3	6	2	2	3	5	....	6	2	1	1	4	2	2	.....
.....	1	.....	.....	2	1	.....	2	2	1	...	1	.....	1	1
.....	3	1	2	2	2	2	3	.....	.....	2	2	....	1	5
.....	4	1	2	4	3	2	5	2	1	2	3	.....	2	6
1	.....	2	....	2	3	1	1	...	2	2	.....	1	2	.....
3	..	.....	1	2	4	3	1	1	1	1	1	1	....	4
4	.....	2	1	4	7	4	2	1	3	3	1	2	2	4
3	.....	1	7	1	5	.....	1	4	2	3	4	2	1	3
1	3	2	1	2	2	.....	1	.....	2	.....	5	2	2	3
4	3	3	8	3	7	.....	2	4	4	3	9	4	3	6
3	4	3	4	5	6	1	3	9	6	2	5	2	7	3
1	3	3	4	1	6	2	8	4	3	4	3	5	6	4
4	7	6	8	6	12	3	11	13	9	6	8	7	13	7
9	8	4	15	5	12	7	3	18	10	6	8	6	12	13
14	13	8	15	3	14	8	4	8	3	6	7	5	12	3
23	21	12	30	8	26	15	7	26	13	12	15	11	24	16
56	60	52	82	41	87	46	58	92	67	50	75	64	81	64
74	84	79	102	57	78	54	57	85	41	48	64	52	74	58
130	144	131	184	98	165	100	115	177	108	98	139	116	155	122

TABLE G.—DEATHS

COUNTIES.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Victoria :											
Males	1	1	1	3	1	1	1	3	1	.....	2
Females	2	1	2	2	.....	1	.....	1	1	.....	.....
Total	3	2	3	5	1	2	1	4	2	.....	2
Waterloo :											
Males	.....	3	.....	1	1	.....	3	2	3	3	4
Females	4	3	4	2	2	.....	2	1	4	2	2
Total	4	6	4	3	3	.....	5	3	7	5	6
Welland :											
Males	1	1	.....	1	1	.....	2	1	1	1	2
Females	3	3	.....	2	1	3	1	.....	1	2	.....
Total	4	4	.....	3	2	3	3	1	2	3	2
Wellington :											
Males	1	1	5	3	1	7	4	1	6	5	8
Females	3	3	3	2	2	1	2	5	3	4	5
Total	4	4	8	5	3	8	6	6	9	9	13
Wentworth :											
Males	3	1	2	3	.....	6	6	4	3	5	5
Females	4	.....	5	3	1	4	5	4	5	1	3
Total	7	1	7	6	1	10	11	8	8	6	8
York :											
Males	5	5	7	9	11	3	14	6	9	6	13
emales	11	8	5	3	5	10	8	4	4	5	13
Total	16	13	12	12	16	13	22	10	13	11	26
Total Males	52	58	64	77	74	74	90	56	91	81	117
Total Females	76	58	49	54	47	58	67	52	83	44	72
Grand Total	128	116	113	131	121	132	157	108	174	125	189

BY AGES, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
.....	1	3	..	1	1	.....	2	2	1	.....	2	1	3	3
.....	1	..	3	.....	3	1	3	1	.....	3	.....	4	2	1
.....	2	3	3	1	4	1	5	3	1	3	2	5	5	4
3	1	4	4	3	2	8	1	2	1	2	2	8	1	2
1	1	1	3	.....	5	4	4	6	3	4	3	3	2	.....
4	2	5	7	3	7	12	5	8	4	6	5	11	3	2
2	2	2	.....	1	2	2	1	2	3	2	1	3	3	1
2	3	1	2	1	1	2	3	4	2	.....	.....	1	1	4
4	5	3	2	2	3	4	4	6	5	2	1	4	4	5
1	3	7	4	4	4	3	7	1	5	1	5	2	4	2
2	5	3	1	4	4	1	6	1	6	4	3	9	2	4
3	8	10	5	8	8	4	13	2	11	5	8	11	6	6
1	4	4	.....	7	7	5	4	5	4	6	2	6	7	6
2	6	8	.....	6	5	4	8	3	9	5	2	6	7	1
3	10	12	....	13	12	9	12	8	13	11	4	12	14	7
7	8	11	8	8	3	6	13	7	11	10	13	15	11	9
5	10	11	6	9	7	9	8	3	11	12	8	10	7	8
12	18	22	14	17	10	15	21	10	22	22	21	25	18	17
73	74	132	85	91	74	81	127	81	94	87	104	126	117	100
55	69	94	67	71	73	64	111	58	114	78	81	118	93	85
128	143	226	152	162	147	145	238	139	208	165	185	244	210	185

TABLE G.—DEATHS

COUNTIES.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Victoria :											
Males	1	2	2	1	1	1	2	2			1
Females	1	2	2	1	2	3	1	2		2	
Total	2	4	4	2	3	4	3	4		2	1
Waterloo :											
Males	3	1	4	2	3	3	2	1			1
Females	1	4	2		4	2		2	1	1	
Total	4	5	6	2	7	5	2	3	1	1	1
Welland :											
Males	2	3	1	4					1		
Females	2	1	1	2	1	2	2	2		1	1
Total	4	4	2	6	1	2	2	2	1	1	1
Wellington :											
Males	3	6	3	1	3		5	5	3	3	1
Females	4	1	4	2	2	1	5	2	2	1	3
Total	7	7	7	3	5	1	10	7	5	4	4
Wentworth :											
Males	4	6	5		2	4	1		1		1
Females	3	4	5	6	1	2	5	4	1	1	2
Total	7	10	10	6	3	6	6	4	2	1	3
York :											
Males	4	7	10	5	11	7	5	3	4	4	
Females	8	7	9	4	10	4	5	4	6	4	
Total	12	14	19	9	21	11	10	7	10	8	
Total Males	108	85	121	96	73	70	85	51	63	48	38
Total Females	85	85	111	63	62	70	64	64	52	42	28
Grand Total	193	170	232	159	135	140	149	115	115	90	66

BY AGES, 1881—*Concluded.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
.....	1	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	9	158
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	156
.....	1	.....	2	.....	1	.....	.....	1	.....	.....	.....	.....	10	314
2	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	314
1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	282
3	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	596
2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	193
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	215
2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	408
1	.....	1	1	1	.....	.....	.....	1	.....	.....	.....	.....	17	411
1	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	12	381
2	.....	1	1	2	1	.....	.....	1	.....	.....	.....	.....	29	792
1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	14	588
.....	1	2	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	560
1	2	2	.....	1	2	1	1	.....	.....	.....	.....	.....	14	1148
.....	4	3	.....	3	2	.....	2	.....	.....	.....	.....	.....	48	1315
.....	3	4	.....	2	1	.....	1	.....	1	1	.....	.....	28	1201
.....	7	7	.....	5	3	.....	3	.....	1	1	.....	.....	76	2516
25	31	22	13	18	10	13	13	6	4	1	.....	10	397	11825
22	22	17	10	18	5	13	9	7	7	3	5	8	272	10996
47	53	39	23	36	15	26	22	13	11	4	5	18	669	22821

TABLE II.—DEATHS BY AGES IN

COUNTY TOWNS.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Brantford :											
Males	19	4	2	3	2	1		2		1	1
Females	19	4	1	6		1	3	1	1	1	
Total	38	8	3	9	2	2	3	3	1	2	1
Walkerton :											
Males	5	1				1					
Females	2	2		1							
Total	7	3		1		1					
Ottawa :											
Males	205	40	14	15	10	5	4	3		2	1
Females	155	44	14	12	7	7	7	3	3	3	1
Total	360	84	28	27	17	12	11	6	3	5	2
Orangeville :											
Males	7	2					1				
Females	3		1								
Total	10	2	1				1				
St. Thomas :											
Males	21	5	2	1					1		2
Females	11	2	2	4	1						
Total	32	7	4	5	1				1		2
Sandwich :											
Males	3										
Females	3	1	1		1				1	1	
Total	6	1	1		1				1	1	
Kingston :											
Males	25	8	6	4	1	1		2			1
Females	22	7	1	1							2
Total	47	15	7	5	1	1		2			3
Owen Sound :											
Males	9								1		
Females	5	7				1		2	1		
Total	14	7				1		2	2		
Cayuga :											
Males	3							1			
Females	2										
Total	5							1			
Milton :											
Males	3	1									
Females											
Total	3	1									
Belleville :											
Males	21	5	2	2				1			
Females	18	4	2			4	1	2	1	1	
Total	39	9	4	2		4	1	3	1	1	

THE COUNTY TOWNS, 1881.

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
.....	.....	...	.....	.....	.....	.....	....	4	.....	1	.....	1	.	.....
.....	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	1	1	1	1	.....	.....	4	.....	1	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.. .	.....	.....	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	....	.....
1	3	1	1	.....	1	2	2	1	2	2	3	2	2	3
2	3	5	....	3	.....	3	6	6	1	.....	4	4	4	1
3	6	6	1	3	1	5	8	7	3	2	7	6	6	4
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.. ..	. ...	1	.....	.....
.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	... ..	.. ...	1	.....	.....
.....	1	.....	... ..	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....
.. ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1
.....	1	.....	.....	...	.....	.....	1	.....	.....	1	1	1	1	1
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	... ..	2	.. .	.....	1
.....	.....	.....	.....	1	.....	.. .	.....	.....	1	.....	.....	.....	.....	1
... ..	.....	.....	.....	1	...	.....	1	.....	1	....	2	.....	.	2
.....	.....	.....	.....	1	1	1	.....	2	3	.....	1	1	3	2
2	1	1	....	2	.....	1	1	2	1	1	2	2	1	5
2	1	1	....	3	1	2	1	4	4	1	3	3	4	7
...	.....	.....	.....	.....	.....	.....	....	1	.....	.....	.....	.. ...	.....	.....
....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
.....	.....	1	...	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	1	.....	... ..	.....	.....	1	.....	.....
. ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....
....	.....	.. ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
.....	.....	.....	.....	...	.....	1	.....	.....	.....	.....	.....	.....	... ..	.....
.....	.....	.....	.....	....	.....	1	.. ..	.....	... ..	.....	.....	.....	1	.....
.....	...	2	.....	.....	.....	.....	2	3	1	.....	.....	1	3	.....
....	.....	....	.....	2	.....	.....	... ..	1	1	3	.....	1	2	1
.....	.....	2	.....	2	.....	.....	2	4	2	3	.....	2	5	1

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Brantford :											
Males			1		2	1			1	1	1
Females	3										
Total	3		1		2	1			1	1	1
Walkerton :											
Males											
Females				1		1	1			1	
Total				1		1	1			1	
Ottawa :											
Males	2	3	4	1	3	1	1	1	4	1	1
Females	2	1	2	1	3	2	3	1	1	3	3
Total	4	4	6	2	6	3	4	2	5	4	4
Orangeville :											
Males				1				1			
Females											1
Total				1				1			1
St. Thomas :											
Males	1		1			1				1	
Females	1	1					1				
Total	2	1	1			1	1			1	
Sandwich :											
Males							1				
Females							1				
Total							2				
Kingston :											
Males	3	3		1				1			
Females	2		2	2	1			1			
Total	5	3	2	3	1			2			
Owen Sound :											
Males	2		1			1					
Females	1		1		1	1					
Total	3		2		1	2					
Cayuga :											
Males											
Females											
Total											
Milton :											
Males					1						
Females		1					1				
Total		1			1		1				
Belleville :											
Males		1					3	1		1	1
Females		3	1	2	1		1	1			
Total		4	1	2	1		4	2		1	1

THE COUNTY TOWNS, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
	2					2	1						1	
1	1	1		1		2		1				3		
1	3	1		1		4	1	1				3	1	
							1	1						
							1	1						
4	3	2	3		7	2	1	3	3	4	5	2	4	2
2	1	2	2	1				1		1	2	1		2
6	4	4	5	1	7	2	1	4	3	5	7	3	4	4
									1					1
	1								1					
	1								2					1
					1				1		1	1		
1	1			1		1					1			
1	1			1	1	1			1		2	1		
		1							1					
		1							1					
					4		2	2			1	1	4	1
	3	2				3	1	1	2	2	1	1	3	1
	3	2			4	3	3	3	2	2	2	2	7	2
		1						1						
	1		1		1			1			1			
	1	1	1		1			2			1			
													1	
		1												
		1											1	
	1							1						
	1							1						
		1	2	1			1	1	1					1
			1		1	1	1	1			1		1	1
		1	3	1	1	1	2	2	1		1		1	2

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Brantford:											
Males		1		1			1	1			1
Females	1	1		1	1				1		1
Total	1	2		2	1		1	1	1		2
Walkerton:											
Males											
Females											
Total											
Ottawa:											
Males	2			1	4	1		2	2	4	3
Females	2	1		3	3	3	2		5		
Total	4	1		4	7	4	2	2	7	4	3
Orangeville:											
Males					1						
Females											
Total					1						
St. Thomas:											
Males								1			1
Females	1										
Total	1							1			1
Sandwich:											
Males									1		1
Females	1										
Total	1								1		1
Kingston:											
Males	1		2		2		1	1	2		1
Females		1		2	1				1	1	1
Total	1	1	2	2	3		1	1	3	1	2
Owen Sound:											
Males											1
Females		1									
Total		1									1
Cayuga:											
Males									1		1
Females											
Total									1		1
Milton:											
Males											
Females											
Total											
Belleville:											
Males		1	1		3			1	1		
Females	1			1			1		1		
Total	1	1	1	1	3		1	1	2		

THE COUNTY TOWNS, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
1	1	3	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	1	1
1	2	2	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....
2	3	5	.....	1	.....	.....	.....	1	.....	1	2	.....	1	1
1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1	3	1	1	3	2	3	1	2	.....	.....	3	1	.....
1	4	1	1	1	.....	1	5	1	1	.....	2	.....	2	.....
1	5	4	2	2	3	3	8	2	3	.....	2	3	3	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
.....	1	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	1	.....
.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	2	1	1	.....	1	1	.....	.....	1	.....	.....	.....	1	.....
2	1	.....	2	2	1	2	4	.....	1	1	1	.....	2	1
.....	.....	.....	1	2	3	.....	6	.....	4	4	1	1	4	1
2	1	.....	3	4	4	2	10	.....	5	5	2	1	6	2
.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....
.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....
.....	1	2	.....	.....	.....	.....	.....	1	1	.....	.....	3	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	1	.....	4	.....	.....	.....	.....	1	2	3	1	4	1
1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	2	1
1	.....	1	.....	5	1	.....	.....	.....	2	2	3	1	6	2

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Brantford:											
Males	1	1	2	1							
Females									1	1	1
Total	1	1	2	1					1	1	1
Walkerton:											
Males											
Females											
Total											
Ottawa:											
Males		2	3	1		3		1	1		3
Females		2	2	1		2	1	1		3	2
Total		4	5	2		5	1	2	1	3	5
Orangeville:											
Males											
Females											
Total											
St. Thomas:											
Males		1	3			1					
Females								1			
Total		1	3			1		1			
Sandwich:											
Males				1	1						
Females											
Total				1	1						
Kingston:											
Males			6	1	2		2	1			
Females		1	2	1		1	2	4		1	
Total		1	8	2	2	1	4	5		1	
Owen Sound:											1
Males											
Females					2						
Total					2						1
Cayuga:											
Males											
Females											
Total											
Milton:											
Males	1										1
Females											
Total	1										1
Belleville:											
Males	1						1		2		
Females	2	3			1	1			1		1
Total	3	3			1	1	1		3		1

THE COUNTY TOWNS, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
													1	74
														71
													1	145
														11
														12
														23
1		1												448
1	1	3											3	396
2	1	4											3	844
														17
														7
														24
1		1											5	59
													5	40
1		1											10	99
														19
													1	17
													1	36
													14	142
2						1							9	141
2						1							23	283
														22
								1						36
								1						58
														10
														5
														15
														10
														3
														13
														86
													2	83
													2	169

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Goderich :											
Males	13	3	1	3	1		1				1
Females	3	4	1	1	1				1		
Total	16	7	2	4	2		1		1		1
Chatham :											
Males	14	2	2					1		2	
Females	20	2	5	1					2		
Total	34	4	7	1				1	2	2	
Sarnia :											
Males	4				1				1		1
Females	7	2			1	2					
Total	11	2			2	2			1		1
Perth :											
Males	5		3		1						
Females	2		1								
Total	7		4		1						
Brockville :											
Males	14	3	1	3	2	4	3	1			
Females	12	12	6	1		2	2	2		2	1
Total	26	15	7	4	2	6	5	3		2	1
Napanee :											
Males	12		2	2	2	1		1			
Females	5	3	4	3	1			1			
Total	17	3	6	5	3	1		2			
St. Catharines :											
Males	23	8	2		1	2					1
Females	29	6	1	4		1	1	4		1	1
Total	52	14	3	4	1	3	1	4		1	2
London :											
Males	59	4	5	3	2		1	2	2		2
Females	56	13	3	5		1	1		1		2
Total	115	17	8	8	2	1	2	2	3		4
Simcoe :											
Males	6	1								1	
Females	2		1		1						
Total	8	1	1		1					1	
Cobourg :											
Males	11	1			1	1	1	1			
Females	8	1									
Total	19	2			1	1	1	1			
Whitby :											
Males	8			2		1		1			
Females	5	1	3	1			1			2	
Total	13	1	3	3		1	1	1		2	

THE COUNTY TOWNS, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
	3					1			1					
				1	1					1			1	
	3			1	1	1			1	1			1	
1	2				1		1			1	2			3
		1			2	1	1				2		1	1
1	2	1			3	1	2			1	4		1	4
											2			
1			1											
1			1								2			
							1				1			
					1									
					1		1				1			
1	1								1	1	1	1	1	1
2								1	2	1			1	1
3	1							1	3	1	1	1	2	2
						1				1		1		
											1			
						1				1	1	1		
	1	2	1	1						1	1		2	1
1		2	1	2	1	2			2			2	1	1
1	1	4	2	3	1	2			2	1	1	2	3	2
5	3		1	1		3		1	2		2	1	2	3
		2	2	1	1	3	1	1	2	1	1	2	3	2
5	3	2	3	2	1	6	1	2	4	1	3	3	5	5
				2										
	1			1				1				1		
	1			3				1				1		
		1												
		1		1							2		1	1
		2		1							2		1	1
		1												
1								1						
1		1						1						

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Goderich :											
Males											2
Females	1				1			1		1	
Total	1				1			1		1	2
Chatham :											
Males				1						2	3
Females	1		2		1		1		1		
Total	1		2	1	1		1		1	2	3
Sarnia :											
Males					1			1			1
Females	2				2	1					
Total	2				3	1		1			1
Perth :											
Males				1							
Females									1		
Total				1					1		
Brockville :											
Males	1	2	1	1	1			2		1	2
Females	2	1	1	1					1	3	
Total	3	3	2	2	1			2	1	4	2
Napanee :											
Males	1										
Females		1							1		
Total	1	1							1		
St. Catharines :											
Males	3	1	1					1			1
Females	1	1				1	1	1			2
Total	4	2	1			1	1	2			3
London :											
Males	1			1	1		1		1	3	2
Females		1	1	2	4	1	2	3	1		3
Total	1	1	1	3	5	1	3	3	2	3	5
Simcoe :											
Males				1					1		
Females			1		1						
Total			1	1	1				1		
Cobourg :											
Males		1		1		1				1	1
Females										1	
Total		1		1		1				2	1
Whitby :											
Males											
Females						1		2			
Total						1		2			

THE COUNTY TOWNS, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
	1		2											
												1		
	1		2									1		
2	1			1	1	1		1				1	1	
		2	1								1	1		
2	1	2	1	1	1	1		1			1	2	1	
	3	1	1								2			
	3	1	1								2			
	1			1								1		
	1			1								1		
			1		1	1	1	1	1			1		2
			1	1	1	1	1	2	1			1	1	2
		1		2	1		1		1		1	1		
		1		2	1		1		1		1	1		
1		2				1		2			2	1	1	1
1					1			1				1		
2		2			1	1		3			2	2	1	1
	1	4	1		1	1		1	2		1		3	1
		3	1	1	1			3					1	1
	1	7	2	1	2	1		4	2		1		4	2
								1						
								1						
			1			1								
			1			1		1				1		
	1	1	2			1	1				1			
	1	1	2			1	1				1	1		

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Goderich :											
Males	1										1
Females					1				1		1
Total	1				1				1		2
Chatham :											
Males	1		1	1					1		
Females								2			1
Total	1		1	1				2	1		1
Sarnia :											
Males	1		1								
Females				1					1		
Total	1		1	1					1		
Perth :											
Males					1	1	1				
Females								1			
Total					1	1	1	1			
Brockville :											
Males						1		1	3	1	1
Females							1		3		
Total						1	1	1	6	1	1
Napanee :											
Males			1				1				
Females		1				1					
Total		1	1			1	1				
St. Catharines :											
Males	1			1		2	1		1	5	
Females		2		2		1			1		
Total	1	2		3		3	1		2	5	
London :											
Males		1		2	1		1		1	1	
Females	1			4	2	1	1	3			
Total	1	1		6	3	1	2	3	1	1	
Simcoe :											
Males	1									1	
Females					1				1		
Total	1				1				1	1	
Cobourg :											
Males						3			1		
Females								1			
Total						3		1	1		
Whitby :											
Males		1				1			1		1
Females	1			1							1
Total	1	1		1		1			1		2

THE COUNTY TOWNS, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	1	.....	.....
.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
.....	1	1	.....	.....	.....	1	2	1	.....	.....	.....	1	1	.....
.....	.....	2	.....	1	.....	.....	1	.....	.....	.....	1	.....	1	.....
.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....
.....	.....	2	1	2	.....	.....	2	.....	.....	.....	1	1	1	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	1	1
.....	.....	1	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	1	.....	2	2	.....	1	.....	.....	1	.....	.....	1	1
1	1	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	1	1
.....	2	2	2	.....	.....	.....	4	.....	.....	2	.....	.....	3	.....
1	3	3	3	1	.....	.....	4	.....	.....	3	.....	.....	4	1
.....	1	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....
.....	1	1	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....	.....
.....	.....	.....	1	2	1	.....	2	1	2	1	.....	1	.....	.....
.....	.....	3	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....
.....	.....	3	3	2	2	.....	2	1	2	1	1	1	.....	.....
4	.....	5	2	3	.....	1	2	1	2	2	.....	1	2	1
2	.....	1	1	.....	1	1	1	1	1	1	1	4	.....	2
6	.....	6	3	3	1	2	3	2	3	3	1	5	2	3
.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....
.....	2	2	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
.....	2	2	.....	1	.....	.....	.....	2	1	.....	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....
.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	1	1
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
.....	.....	1	.....	1	.....	.....	.....	2	.....	.....	.....	1	1	1

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Goderich :											
Males						1					
Females				2			1				
Total				2		1	1				
Chatham :											
Males				1				1			
Females		2	1								1
Total		2	1	1				1			1
Sarnia :											
Males											
Females											
Total											
Perth :											
Males	1			2							
Females			1		1						
Total	1		1	2	1						
Brockville :											
Males	1		1	2	1			1			
Females			1				1		1		
Total	1		2	2	1		1	1	1		
Napanee :											
Males	1	2		1						1	
Females	1			1							
Total	2	2		2						1	
St. Catharines :											
Males	3				1					1	
Females			4				1				
Total	3		4		1		1				
London :											
Males	3	2		6		1	2		3		
Females			2	2	1	3	1	2	1	1	1
Total	3	2	2	8	1	4	3	2	4	1	1
Simcoe :											
Males	1										
Females		1									
Total	1	1									
Cobourg :											
Males					1						
Females						1					
Total					1	1					
Whitby :											
Males			1					1			
Females	1							1	1		
Total	1		1					2	1		

THE COUNTY TOWNS, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100.	Unknown.	Total.
													2	42
												1		31
												1	2	73
			1			1							2	63
														61
			1			1							2	124
														21
														25
														46
	1													24
				1										16
	1			1										40
													3	78
													4	90
													7	168
														39
														30
														69
													5	97
	1							1					4	98
	1							1					9	195
													6	186
	1												11	188
	1												17	374
													1	20
1														20
1													1	40
								1						32
									1	1				24
								1	1	1				56
														31
														2
														58

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Woodstock:											
Males	8	3	3	4	1	1	2			1	
Females	7	2	2	2	1		3	2	1		2
Total	15	5	5	6	2	1	5	2	1	1	2
Brampton:											
Males	8	2	1	3	2	1					
Females	11	2				1		1			
Total	19	4	1	3	2	2		1			
Stratford:											
Males	19	3			1		1			1	
Females	19	3		3	1		1		1		
Total	38	6		3	2		2		1	1	
Peterborough:											
Males	12	4	2	2	1	1					
Females	14	4	2		2			1			
Total	26	8	4	2	3	1		1			
L'Orignal:											
Males	1										
Females				1							
Total	1			1							
Picton:											
Males	2	1									
Females	3	1		1						1	
Total	5	2		1						1	
Pembroke:											
Males	12	3	4	1		2	1			1	
Females	5	1		1							
Total	17	4	4	2		2	1			1	
Barrie:											
Males	8	1	1								
Females	7	1		2	2						
Total	15	2	1	2	2						
Cornwall:											
Males	10	6	2	1	2	1	1		2		
Females	6	3	5	2	1	2					
TOtal	16	9	7	3	3	3	1		2		
Lindsay:											
Males	9	2	2	1				1			1
Females	10	3	1	2			1			1	
Total	19	5	3	3			1	1		1	1
Berlin:											
Males	9	3		1	1		1	1			
Females	10	4			1						1
Total	19	7		1	2		1	1			1

THE COUNTY TOWNS, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
	1			1			1					1		
1											1	1		
1	1			1			1				1	2		
									2	2	1			
				1		2		1	1	1			1	1
				1		2		1	3	3	1		1	1
							1	1		1	1		2	
1							1					1		
1							2	1		1	1	1	2	
					1		2	1	1	1	3			2
	2	1	1		1		1		1					1
	2	1	1		2		3	1	2	1	3			3
			1						1	1				
1		1									1			
1		1	1						1	1	1			
				1		1								
							1	1						
				1		1	1	1						
								1		1				1
	1							3		1	1			
	1							4		2	1			1
1											1			
1		1				1		1						
2		1				1		1			1			
				1						1		1		
												1		
				1						1		2		
												1		
						1	1		1	1	1		1	
						1	1		1	1	1	1	1	

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Woodstock:											
Males				1				1	1		
Females	1									1	
Total	1			1				1	1	1	
Brampton:											
Males		1			1	1					
Females				1	1						2
Total		1		1	2	1					2
Stratford:											
Males	2				2			1			
Females	1							1	1		
Total	3				2			2	1		
Peterborough:											
Males				1			1	1		1	1
Females			1						1		
Total			1	1			1	1	1	1	1
L'Orignal:											
Males											
Females					1						
Total					1						
Picton:											
Males					1		1				
Females						1					
Total					1	1	1				
Pembroke:											
Males			1			1			1	1	
Females				2							1
Total			1	2		1			1	1	1
Barrie:											
Males	1	1									
Females	1		1						2		
Total	2	1	1						2		
Cornwall:											
Males	1	3					1		1	1	
Females					2					1	
Total	1	3			2		1		1	2	
Lindsay:											
Males	1					1	1		1		
Females	1						1	2			
Total	2					1	2	2	1		
Berlin:											
Males	1	2	1								
Females								2	1		
Total	1	2	1					2	1		

THE COUNTY TOWNS, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
							2	1			1			
2	1	1				1								
2	1	1				1	2	1			1			
					1					2			1	
		2						1		1	1			
		2			1			1		3	1		1	
	1				1		1	1	2				1	1
		1						1	1					
	1	1			1		1	2	3				1	1
2		1						2	1	1				
								1						1
2		1						3	1	1				1
					3						1			
			3					1						
			3		3			1			1			
	1		1		1									
	1		1		1									
1		1								1	1			1
		1	1				1							
1		2	1				1			1	1			1
	1	1			1	1		2						1
1				1				1		1	1			
1	1	1		1	1	1		3		1	1			1
		1		2	1		1							
	1			1			2							
	1	1		3	1		3							
							1						1	
		1	1										1	1
		1	1				1						2	1

TABLE II.—DEATHS BY AGES IN

COUNTY TOWNS.	52 years.	53 years.	54 years.	55 years.	56 year.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Woodstock :											
Males			1								
Females	1			2							
Total	1		1	2							
Brampton :											
Males			1					1	1		
Females											
Total			1					1	1		
Stratford :											
Males			1				1	1	1		1
Females	1		2	2		1					
Total	1		3	2		1	1	1	1		1
Peterborough :											
Males			1		3						
Females	1					1					
Total	1		1		3	1					
L'Orignal :											
Males											
Females											
Total											
Picton :											
Males				1	1						1
Females			2								1
Total			2	1	1						2
Pembroke :											
Males											
Females											
Total											
Barrie :											
Males								1			
Females			1		1						
Total			1		1			1			
Cornwall :											
Males						2					
Females				1							
Total				1		2					
Lindsay :											
Males					1		1				
Females				1							
Total				1	1		1				
Berlin :											
Males		1	2	1			1			1	
Females											1
Total		1	2	1			1			1	1

THE COUNTY TOWNS, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
			2		1					1			1	
			1		1							1		1
			3		2					1		1	1	1
			2				1					1		1
		1							2	1				1
		1	2				1		2	1		1		2
		2				2		1						
					1				1	1		1	1	
		2			1	2		1	1	1		1	1	
		1		1						1			1	1
1								1	1	1				1
1		1		1				1	1	2			1	2
		1		1										
		1		1										
1	1			1			1			1		1		1
				1									1	1
1	1			2			1			1		1	1	2
		1						1						1
		1						1						1
							1							
1											1			
1							1				1			
		1	1							1		1		
			1			1								
		1	2			1				1		1		
		1			1									
			1				2	1					1	
		1	1		1		2	1					1	
1			2		1									
		1	1				1	2						
1		1	3		1		1	2						

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Woodstock:											
Males			1								
Females	1		2								
Total	1		3								
Brampton:											
Males			1		1						
Females				1						1	
Total			1	1	1					1	
Stratford:											
Males						1					
Females									1	1	
Total						1			1	1	
Peterborough:											
Males	2		1			1					
Females		1						1			
Total	2	1	1			1		1			
L'Orignal:											
Males											
Females											
Total											
Picton:											
Males			1								
Females											
Total			1								
Pembroke:											
Males											
Females			1								
Total			1								
Barrie:											
Males	1									1	
Females			2	1		1					
Total	1		2	1		1				1	
Cornwall:											
Males	1								1		
Females				1							
Total	1			1					1		
Lindsay:											
Males			1	1				1			
Females	1										
Total	1		1	1				1			
Berlin:											
Males			1		1	1					
Females		2			2			1			
Total		2	1		3	1		1			

THE COUNTY TOWNS, 1881—*Continued.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
			1										2	44
														42
			1										2	86
									1					40
		1												40
		1							1					80
														55
														50
														105
													1	59
													1	45
													2	104
													1	2
														4
													1	6
														23
														20
														43
														31
														18
														49
													2	26
													1	34
													3	60
1														50
														35
1														85
													2	37
													1	35
													3	72
														36
1														41
1														77

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.
Welland:											
Males	3	2	.....	1	.....	.....	.....	.....	.....	.....	.....
Females	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Total	4	3	1	1	.....	.....	.....	.....	.....	.....	.....
Guelph:											
Males	26	6	1	4	1	.....	2	3	.....	.....	.....
Females	18	5	2	2	1	.....	1	.....	1	.....	.....
Total	44	11	3	6	2	.....	3	3	1	.....	.....
Hamilton:											
Males	134	24	8	7	4	4	3	4	2	2	2
Females	92	21	11	8	7	2	4	4	1	.....	2
Total	226	45	19	15	11	6	7	8	3	2	4
Toronto:											
Males	304	60	28	10	12	9	14	5	5	4	1
Females	228	67	22	15	9	11	7	6	4	3	1
Total	532	127	50	25	21	20	21	11	9	7	2
Total Males	1055	208	94	73	49	36	36	30	14	15	14
Total Females	820	233	93	79	38	35	33	29	19	16	13
Grand Total	1875	441	187	152	87	71	69	59	33	31	27

THE COUNTY TOWNS, 1881—*Continued.*

11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	19 years.	20 years.	21 years.	22 years.	23 years.	24 years.	25 years.
.....	1	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
.....	1	.....	.....	.....	1	1	1	1	.....	.....	.....	.....	1	.....
.....	1	.....	.....	.....	1	.....	.....	1	2	3	.....	1	.....	1
.....	2	.....	.....	.....	.....	.....	3	1	2	1	3	3	.....	1
.....	3	.....	.....	.....	1	.....	3	2	4	4	3	4	.....	2
.....	4	1	2	3	4	.....	2	2	3	1	1	3	1	4
.....	2	1	.....	2	1	.....	2	1	2	7	.....	2	3	3
.....	6	2	2	5	5	.....	4	3	5	8	1	5	4	7
5	1	1	2	4	4	1	.....	9	8	8	3	12	4	1
6	2	2	3	3	4	5	6	8	4	6	10	5	4	15
11	3	3	5	7	8	6	6	17	12	14	13	17	8	16
14	22	9	9	15	14	11	17	28	27	25	24	30	22	23
19	14	20	9	21	13	20	24	30	21	25	31	26	25	37
33	36	29	18	36	27	31	41	58	48	50	55	56	47	60

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	26 years.	27 years.	28 years.	29 years.	30 years.	31 years.	32 years.	33 years.	34 years.	35 years.	36 years.
Welland:											
Males			2								
Females						1					
Total			2			1					
Guelph:											
Males		1	1				1		1		
Females						1	3	2			
Total		1	1			1	4	2	1		
Hamilton:											
Males	4		4	2		1	2	1	2	2	1
Females	5	5	3	1	4	1	3	1	3	1	1
Total	9	5	7	3	4	2	5	2	5	3	2
Toronto:											
Males	14	6	5	5	7	5	6	3	8	6	5
Females	5	5	11	4	5	9	5	8	6	13	11
Total	19	11	16	9	12	14	11	11	14	19	16
Total Males	38	25	23	18	20	14	19	15	22	22	22
Total Females	30	20	27	17	28	21	24	26	20	25	24
Grand Total	68	45	50	35	48	35	43	41	42	47	46

THE COUNTY TOWNS, 1881—*Continued.*

37 years.	38 years.	39 years.	40 years.	41 years.	42 years.	43 years.	44 years.	45 years.	46 years.	47 years.	48 years.	49 years.	50 years.	51 years.
									1					
1														
1									1					
			2					2		1	1	1		
	1		1									2	1	
	1		3					2		1	1	3	1	
1	1	2	3	2			3	2	2	1	2	1	4	2
	2	2	3		2	2	6		3	3	3	2	1	3
1	3	4	6	2	2	2	9	2	5	4	5	3	5	5
3	7	4	13	4	8	7	3	14	7	5	6	5	11	8
13	10	6	9	2	13	4	4	3	2	4	6	3	11	2
16	17	10	22	6	21	11	7	17	9	9	12	8	22	10
14	24	23	31	13	30	18	19	38	22	15	23	14	34	20
22	24	26	25	9	21	14	16	20	11	12	21	19	19	14
36	48	49	56	22	51	32	35	58	33	27	44	33	53	34

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	52 years.	53 years.	54 years.	55 years.	56 years.	57 years.	58 years.	59 years.	60 years.	61 years.	62 years.
Welland :											
Males											
Females											
Total											
Guelph :											
Males			1			2	1		2	1	3
Females			1	2					1		1
Total			2	2		2	1		3	1	4
Hamilton :											
Males	2	1	2	3		3	3	4	3	2	2
Females	2		5		1	2	1	2	3		3
Total	4	1	7	3	1	5	4	6	6	2	5
Toronto :											
Males	5	5	3	8	6	3	12	5	6	4	11
Females	6	7	5	1	4	5	5	4	2	3	7
Total	11	12	8	9	10	8	17	9	8	7	18
Total Males	15	11	18	19	23	19	25	19	28	20	30
Total Females	19	14	16	24	15	15	11	13	21	4	18
Grand Total	34	25	34	43	38	34	36	32	49	24	48

THE COUNTY TOWNS, 1881—*Continued.*

63 years.	64 years.	65 years.	66 years.	67 years.	68 years.	69 years.	70 years.	71 years.	72 years.	73 years.	74 years.	75 years.	76 years.	77 years.
.....	.....	.....	.....	.....	.....	.....	....	.....	1	.....	.....	.....	2	.....
.....	.....	.....	.....	.....	.....	.....	....	.....	1	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....
.....	.....	1	.....	2	.....	1	.....	1	2	.....	.....	.....	1	.....
.....	1	1	.....	.....	2	.....	4	.....	1	.....	1	1	.....	.....
.....	1	2	.....	2	2	1	4	1	3	.....	1	1	1	.....
2	3	1	....	4	3	2	2	2	1	2	.....	.....	1	3
.....	1	4	.....	2	2	2	2	2	8	2	.....	5	4	.....
2	4	5	.....	6	5	4	4	4	9	4	.....	5	5	3
2	3	8	7	7	2	6	5	5	8	9	4	4	8	1
2	10	7	5	6	4	7	6	3	6	7	7	6	6	6
4	13	15	12	13	6	13	11	8	14	16	11	10	14	7
16	13	34	21	31	13	18	25	17	24	23	11	18	30	14
9	26	31	18	19	20	15	32	16	28	22	15	23	25	16
25	39	65	39	50	33	33	57	33	52	45	26	41	55	30

TABLE H.—DEATHS BY AGES IN

COUNTY TOWNS.	78 years.	79 years.	80 years.	81 years.	82 years.	83 years.	84 years.	85 years.	86 years.	87 years.	88 years.
Welland:											
Males											
Females											
Total											
Guelph:											
Males	1						2	1		1	
Females	1					1	1				1
Total	2					1	3	1		1	1
Hamilton:											
Males	1	5	1		1	1					
Females	2	3	4	2		1	3	1	1		
Total	3	8	5	2	7	2	3	1	1		
Toronto:											
Males	2	3	7	3	5	4	2	3	2	1	
Females	4	2	4	3	4	4	2	4	2		
Total	6	5	11	6	9	8	4	7	4	1	
Total Males	21	16	30	20	14	14	9	10	9	5	5
Total Females	13	17	26	15	11	15	13	16	9	8	7
Grand Total	34	33	56	35	25	29	22	26	18	13	12

THE COUNTY TOWNS, 1881—*Concluded.*

89 years.	90 years.	91 years.	92 years.	93 years.	94 years.	95 years.	96 years.	97 years.	98 years.	99 years.	100 years.	Over 100 years.	Unknown.	Total.
....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	26
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	98
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	85
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	183
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	335
.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	313
.....	1	2	.....	.....	.....	..	1	.....	.....	.....	.....	....	6	648
.....	1	2	.....	2	1	.....	1	.....	.....	.....	.....	.....	3	879
.....	2	4	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	811
.....	3	6	.....	2	1	.....	1	.....	1	.....	.....	.....	11	1690
4	3	4	2	2	1	1	1	1	1	.....	.....	.....	65	3263
6	5	10	.....	1	.....	1	1	2	2	1	.....	1	60	3003
10	8	14	2	3	1	2	2	3	3	1	.....	1	125	6266

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Brantford :										
Males		1		1		2				
Females				4		4				1
Total		1		5		6				1
Walkerton :										
Males										
Females			1	1					1	
Total			1	1					1	
Ottawa :		1								
Males		2		38		8		2		4
Females			1	43	1	11	4	3	1	2
Total		3	1	81	1	19	4	5	1	6
Orangeville :										
Males		1								
Females		1								
Total		2								
St. Thomas :										
Males		1				2				
Females						5	1	1		
Total		1				7	1	1		
Sandwich :										
Males										
Females				1		2				
Total				1		2				
Kingston :										
Males			1	1		3				
Females			1			1	1	1		2
Total			2	1		4	1	1		2
Owen Sound :										
Males										
Females			1	1			1		1	
Total			1	1			1		1	
Cayuga :										
Males										
Females										
Total										

BY COUNTY TOWNS, 1881.

Miasmatic.										Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remitent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
1	....	2	....	....	...	4	....	....	10	.....	1	5	.....	....	1	.....	1
2	2	1	....	2	....	1	1	....	6	.....	.....	5	2	.....	1	1	3
3	2	3	....	2	....	5	1	...	16	....	1	10	2	.....	2	1	4
....	....	....	1	....	...	1	....	....	1	.....	.....	.....	.....	.....	.....	.....	.. ..
....	...	....	....	....	....	....	..	....	1	.....	.....	3	.....	.....	.....	.....	.....
....	....	....	1	....	....	1	....	....	2	.....	.....	3	.....	.....	.....	.....	.....
2	44	2	...	1	....	3	3	2	1	1	1	25	18	....	.....	6	4
1	28	1	3	3	....	...	2	2	1	4	4	37	22	.....	.....	5	4
3	72	3	3	4	....	3	5	4	2	5	5	62	40	.....	....	11	8
.. .	....	....	...	....	....	....	....	...	.....	.....	.....	2	.....	.....	.....	.....	.....
....	...	....	....	....	....	...	....	....	....	.....	.....	1	.....	.....	....	.....	.....
....	....	....	....	....	..	....	....	....	.....	.. ..	.....	3	.....	.....	....	.....	.....
2	2	2	1	....	1	3	....	....	.....	.....	.. ..	2	1	.....	.....	.....	....
2	5	1	..	....	....	3	....	3	.....	.....	1	6	1	.....	.....	....	1
4	7	3	1	....	1	6	....	3	.....	.. ..	1	8	2	.....	. ...	.....	1
....	1	...	....	....	....	1	....	....	.....	.....	...	2	.....	. ....	.....	2	.....
....	....	...	....	....	....	....	....	....	.....	.....	.....	4	.....	....	....	.....	1
....	1	....	....	....	..	1	....	....	.....	.....	.....	6	.....	....	... .	2	1
....	3	3	1	1	....	5	1	....	1	.....	3	16	.....	.....	1	.....	5
....	2	2	...	....	1	1	5	1	3	.....	7	16	.....	.....	.....	3	6
....	5	5	1	1	1	6	6	1	4	.....	10	32	.....	.....	1	3	11
1	1	1	....	....	....	2	....	....	.....	.....	1	2	.....	.....	.....	.....	....
....	1	....	....	1	....	....	....	....	1	.....	.....	1	.....	....	1	1	1
1	2	1	....	1	....	2	....	....	1	.....	1	3	....	.....	1	1	1
....	....	....	...	....	....	....	2	....	.....	.....	.....	1	.....	.....	.....	.	2
....	....	....	....	....	....	1	....	....	.....	.....	.....	1	.....	....	....	.. ..	.....
....	....	....	....	..	....	1	2	....	.....	.....	.....	2	....	.....	.....	.....	2

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Diseases.	Congestion of Lungs.
Brantford :																
Males	....	....	4	2	3	....	1	3	....	....	....	....	8	....	....	2
Females	....	....	2	3	2	....	....	....	....	....	1	....	10	....	....	1
Total	....	....	6	5	5	....	1	3	....	....	1	....	18	....	....	3
Walkerton :																
Males	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....
Females	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....
Ottawa :																
Males	....	....	11	6	8	....	....	4	....	....	10	....	11	1	....	4
Females	....	....	5	1	3	....	....	6	....	....	6	....	5	....	1	4
Total	....	....	16	7	11	....	....	10	....	....	16	....	16	1	1	8
Orangeville :																
Males	....	....	1	1	....	....	....	....	....	....	....	....	2	....	....	1
Females	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	2	1	....	....	....	....	....	....	....	....	2	....	....	1
St. Thomas :																
Males	....	1	3	2	3	....	....	....	....	1	4	....	3	....	....	1
Females	....	....	1	....	1	....	....	....	....	....	1	....	1	....	....	....
Total	....	1	4	2	4	....	....	....	....	1	5	....	4	....	....	1
Sandwich :																
Males	....	....	....	....	1	....	....	1	1	....	....	....	....	....	....	....
Females	....	....	1	....	....	....	....	1	....	....	....	....	1	....	....	....
Total	....	....	1	....	1	....	....	2	1	....	....	....	1	....	....	....
Kingston :																
Males	....	2	12	3	3	....	....	3	1	....	13	....	4	2	....	....
Females	....	....	7	4	1	....	....	5	1	....	5	....	8	....	....	1
Total	....	2	19	7	4	....	....	8	2	....	18	....	12	2	....	1
Owen Sound :																
Males	....	....	1	....	....	....	....	....	....	....	....	2	2	....	....	3
Females	....	....	5	1	....	1	....	1	....	....	....	....	2	....	1	2
Total	....	....	6	1	....	1	....	1	....	....	....	2	4	....	1	5
Cayuga :																
Males	....	....	1	....	1	1	....	....	....	....	....	....	1	....	....	....
Females	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	1	2	1	1	....	....	....	....	....	....	1	....	....	....

BY COUNTY TOWNS, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
.....	.....	.....	1	3	.....	3	5	.....	.....	10	74
1	.....	.....	1	1	1	2	.....	1	.....	9	71
1	.. ..	.....	2	4	1	5	5	1	.....	19	145
.....	.....	.....	1	3	.....	.....	1	.....	... .	1	11
.....	.....	.....	.....	2	.....	.....	.....	.....	1	1	12
.....	.....	.....	1	5	.....	.....	1	..	1	2	23
6	.....	.....	19	77	.....	15	20	1	1	88	448
5	.. ..	.....	19	57	4	20	13	1	.....	61	396
11		. ...	38	134	4	35	33	2	1	149	844
.....	.....	... .	.....	1	.....	.....	1	.....	.. ....	7	17
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3	7
.....	.... .	.....	.....	2	....	.....	1	.....	.....	10	24
1	...	.....	.....	3	.....	4	4	.....	... .	12	59
.....	.....	. ..	.....	1	1	1	... .	.....	.....	3	40
1	.....	.....	. ...	4	1	5	4	.....	.....	15	99
1	.....	.....	.....	2	.....	4	.....	.....	.....	3	19
1	.....	.....	. ..	....	.....	.....	.....	.. ....	.....	5	17
2	.....	.....	.....	2	.. ..	4	. .. ...	.....	.....	8	36
4	.....	.....	2	1	.....	13	6	.....	1	27	142
2	.....	.....	1	9	4	20	2	.....	1	17	141
6	.....	.....	3	10	4	33	8	.....	2	44	283
1	.....	.....	.....	1	.....	1	1	1	.....	1	22
.....	.....	.....	1	2	.....	3	1	.....	.....	5	36
1	.....	.....	1	3	.....	4	2	1	.....	6	58
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	1	.. ....	.....	.....	.....	5
....	.....	.....	.....	1	.....	1	.....	.....	... ...	....	15

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Milton:										
Males										
Females										
Total										
Belleville:										
Males			1	2						
Females			1	1		1	1			
Total			2	3		1	1			
Goderich:										
Males				2		2	3	1		
Females				2			4			
Total				4		2	7	1		
Chatham:										
Males				2				1		
Females		1		2		1	2		1	
Total		1		4		1	2	1	1	
Sarnia:										
Males				2		2		1		
Females				1						
Total				3		2		1		
Perth:										
Males				1		1				
Females				1						
Total				2		1				
Brockville:										
Males			1	14		1				
Females			3	19		3			1	
Total			4	33		4			1	
Napanee:										
Males			3	1						
Females				3						
Total			3	4						
St. Catharines:										
Males			1	4		2	2	1		
Females				4		3				
Total			1	8		5	2	1		

BY COUNTY TOWNS, 1881—*Continued.*

Miasmatic.									Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
....	1	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....
....	....	2	....	1	....	....	3	1	2	....	....	10	1	....	1	1	2
2	....	1	....	1	1	....	3	1	3	....	1	13	....	....	....	....	2
2	....	3	....	2	1	....	6	2	5	....	1	23	1	....	1	1	4
1	4	2	....	....	....	....	....	....	....	....	....	2	....	....	....	....	1
....	2	....	....	....	....	....	....	....	....	....	....	2	1	....	....	1	1
1	6	2	....	....	....	....	....	....	....	....	....	4	1	....	....	1	2
1	3	4	....	....	1	5	....	1	....	1	....	10	....	....	....	2	2
....	3	1	....	1	....	4	..	3	1	....	2	7	....	....	....	....	....
1	6	5	....	1	1	9	....	4	1	1	2	17	....	....	....	2	2
....	....	..	....	....	..	3	....	....	....	....	....	2	....	....	....	....	....
....	2	1	....	....	....	3	....	....	....	....	1	....	....	....	....	2	....
....	2	1	....	....	....	6	....	....	....	....	1	2	....	....	....	2	....
....	1	1	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....
....	....	1	....	....	....	....	....	....	....	....	1	4	....	....	....	2	....
....	1	2	....	..	....	..	....	....	....	....	2	4	....	....	....	3	..
....	2	5	1	....	....	4	....	....	1	....	1	12	....	....	1	1	....
....	5	5	1	....	....	....	....	....	....	....	1	15	....	....	....	5	1
....	7	10	2	....	....	4	....	....	1	....	2	27	....	....	1	6	1
....	3	....	....	....	....	1	....	....	....	....	1	8	1	....	....	1	....
....	1	....	....	....	....	....	....	....	1	....	....	3	1	....	....	....	1
....	4	....	....	....	....	1	....	....	1	....	1	11	2	....	....	1	1
1	1	4	....	....	....	4	....	2	2	1	....	17	....	....	....	....	2
2	1	3	1	....	....	7	....	1	5	2	4	14	....	....	....	2	1
3	2	7	1	....	....	11	....	3	7	3	4	31	....	....	....	2	3

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Milton:																
Males			1	1	1								3			
Females																
Total			1	1	1								3			
Belleville:																
Males			3	1	2	1	1	1	1		3		1	1		4
Females			3	4	1			4								2
Total			6	5	3	1	1	5	1		3		1	1		6
Goderich:																
Males	1		3	2	1			1					1			1
Females			1		4	2		1			1		2			
Total	1		4	2	5	2		2			1		3			1
Chatham:																
Males			2		3	2		2					2			
Females			3	1	1	3	1	1					4	1	1	2
Total			5	1	4	5	1	3					6	1	1	2
Sarnia:																
Males			2			1					1					
Females			1				1	1			1		1			1
Total			3			1	1	1			2		1			1
Perth:																
Males			3		4	2		1			1		3			1
Females										1			3			
Total			3		4	2		1		1	1		6			1
Brockville:																
Males			4		3					1	1		7			
Females			2	3									4		1	1
Total			6	3	3					1	1		11		1	1
Napanee:																
Males			1	2	2			2							1	3
Females				1	3	1		3					1		2	
Total			1	3	5	1		5					1		3	3
St. Catharines:																
Males			7	4	2	1	1	1	2		1		3			
Females		1	4	4			2	2			1		1			2
Total		1	11	8	2	1	3	3	2		2		4			2

BY COUNTY TOWNS, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
....	.....	.....	...	.....	....	.. ..	1	.....	.....	1	10
.....	.....	.....	.....	...	1	.....	.....	.....	.....	1	3
.....	.....	.....	.....	.....	1	.. . .	1	.....	.....	2	13
5	.....	.....	2	7	.....	8	2	.....	.....	16	86
2	.....	.....	1	9	....	10	.....	.....	1	14	83
7	.....	.....	3	16	.....	18	2	.....	1	30	169
2	.....	.....	1	1	.....	1	3	.....	1	5	42
.....	.....	....	1	.....	.....	2	1	.....	.....	3	31
2	.....	....	2	1	.....	3	4	..... .	1	8	73
1	.....		1	2	.....	3	3	1	.....	8	62
2	....	.....	... ..	4	.....	5	.....	1	.....	2	62
3	.... .	. ...	1	6	.....	8	3	2	.....	10	124
.....	.....	.....	.....	2	....	1	.....	1	.....	3	21
.. .	.....	.....	.....	5	.....	. .....	1	..... .	.....	3	25
.....	... .	... .	.....	7	.....	1	1	1	.....	6	46
.....	.....	....	.....	.....	.....	3	... .	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	3	.....	.. ....	.....	.....	16
.....	.....	.....	....	..	.....	6	.....	.....	.....	....	40
.....	.....	.....	.....	2	....	3	3	2	2	6	78
1	.....	.....	.....	2	.....	5	.....	.....	1	11	90
1	....	.....	..	4	.....	8	3	2	3	17	168
.....	.....	.....	.....	3	.....	2	1	1	.....	2	39
... .	.....	.....	.....	.....	.....	3	1	.....	1	4	30
.....	.....	.....	.....	3	....	5	2	1	1	6	69
4	.....	.....	....	3	... .	3	5	3	2	11	97
4	.....	.....	... ..	6	.....	5	1	1	1	13	98
8	.....	. ....	.....	9	.....	8	6	4	3	24	195

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Miasmatic.										
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Infantile Fever.	Erysipelas.	Metria.	Influenza.
London :											
Males				2		7	1		2		
Females				2	1	5	3			3	
Total				4	1	12	4		2	3	
Cobourg :											
Males						4					
Females						1					
Total						5					
Simcoe :											
Males											
Females			1								
Total			1								
Whitby :											
Males				3			1				
Females				4							
Total				7			1				
Woodstock :											
Males											
Females						1					
Total						1					
Brampton :											
Males		2					2				
Females							2		2		1
Total		2					4		2		1
Stratford :											
Males				2		1					
Females				2		1					
Total				4		2					
Peterborough :											
Males				2		1	2		2		
Females				3		1	3		1		
Total				5		2	5		3		
L'Orignal :											
Males											
Females			1								
Total			1								

BY COUNTY TOWNS, 1881—*Continued.*

Miasmatic.									Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
1	13	11	...	....	....	3	1	1	1	.....	3	14	1	... ..	.....	3	1
2	11	8	..	....	1	1	...	1	1	.....	3	24	4	.....	.....	3	3
3	24	19	....	....	1	4	1	2	2	.....	6	38	5	.....	.....	6	4
....	3	1	....	....	....	1	1	....	.....	.....	.....	2	1	.....	.....	1	1
....	2	....	....	....	....	2	....	....	.....	.....	1	3	.....	.....	.....	1	.....
....	5	1	....	....	....	3	1	....	.....	.....	1	5	1	.....	.....	2	1
....	....	....	....	1	....	1	....	....	.....	.....	1	2	.....	.....	.....	.....	.....
....	1	....	....	....	....	1	....	1	.....	.....	2	5	.....	... .	1	.....	1
....	1	.. .		1	....	2	....	1	.....	.....	3	7	.....	.....	1	.....	1
....	....	....	....	....	....	....	....	....	.....	....	1	4	1	.....	.....	.....	3
1	1	....	.	....	....	2	....	....	1	.....	1	3	.....	.....	.....	.....	.....
1	1	....	....	....	....	2	....	....	1	.....	2	7	1	.....	.....	.....	3
...	...	....	....	....	...	....	....	1	12	.....	1	3	.....	.....	.....	.....	2
2	1	....	....	....	...	....	1	1	11	.....	.....	7	.....	.....	.....	.....	1
2	1	....	....	....	....	....	1	2	23	.....	1	10	.....	.....	.....	.....	3
1	1	2	..	....	....	1	....	....	2	.....	3	4	.....	.....	.....	1	2
....	....	2	....	....	....	....	1	....	2	.. .	... .	9	.....	.....	.....	....	1
1	1	4	. ..	....	....	1	1	....	4	.....	3	13	....	.....	.....	1	3
....	2	....	..	....	....	1	....	....	.. ...	.....	1	5	2	.....	1	1	2
....	....	....	....	....	....	1	....	....	2	.....	2	5	4	....	.....	1	.....
....	2	....	....	....	....	2	....	....	2	....	3	10	6	....	1	2	2
2	2	....	....	....	1	3	....	....	1	.....	1	9	1	.....	1	.....	2
2	1	....	....	....	....		2	....	.....	.....	1	1	.....	.....	.....	1	1
4	3	....	....	....	1	3	2	....	1	.....	2	10	1	.....	1	1	3
....	....	....	....	..	...	....	....	...	.....	.....	.....	.....	.....	.....	.....	1	.....
....	....	....	....	....	....	....	....	....	.....	.....	.....	1	.....	.....	.....	.....	.....
....	....	..	....	....	....	....	....	....	.....	.....	.....	1	.....	.....	.....	1	.....

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
London:																
Males	....	....	13	3	2	12	3	2	1	....	4	....	7	1	2	1
Females	....	....	10	5	9	7	....	1	....	1	3	....	6	1	1	2
Total	....	....	23	8	11	9	3	3	1	1	7	....	13	2	3	3
Cobourg:																
Males	....	....	....	4	....	....	....	....	....	....	....	....	2	....	....	1
Females	....	....	....	....	3	2	....	1	....	....	....	....	2	....	....	1
Total	....	....	....	4	3	2	....	1	....	....	....	....	4	....	....	2
Simcoe:																
Males	....	....	....	....	2	4	....	....	....	....	....	....	1	....	....	....
Females	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....
Total	....	....	....	....	3	4	....	1	....	....	....	....	1	....	....	....
Whitby:																
Males	....	....	1	....	....	2	....	2	1	....	1	....	2	....	....	....
Females	....	....	....	....	4	....	....	1	....	....	1	....	....	....	....	....
Total	....	....	1	....	4	2	....	3	1	....	2	....	2	....	....	....
Woodstock:																
Males	....	....	2	....	1	....	....	....	1	....	....	....	2	....	....	1
Females	....	....	1	1	1	....	....	2	....	....	....	....	1	....	....	1
Total	....	....	3	1	2	....	....	2	1	....	....	....	3	....	....	2
Brampton:																
Males	....	....	1	....	2	3	....	....	....	....	....	....	1	....	....	1
Females	....	....	2	2	1	....	....	....	....	....	1	1	1	....	....	1
Total	....	....	3	2	3	3	....	....	....	....	1	1	2	....	....	2
Stratford:																
Males	....	....	4	2	3	2	....	....	....	....	2	....	5	....	....	3
Females	....	....	5	1	6	2	....	5	....	....	2	....	....	....	....	1
Total	....	....	9	3	9	4	....	5	....	....	4	....	5	....	....	4
Peterborough:																
Males	....	....	3	5	3	....	1	....	....	....	....	....	2	....	1	....
Females	....	....	1	4	1	1	1	....	....	....	....	....	2	....	....	2
Total	....	....	4	9	4	1	2	....	....	....	....	....	4	....	1	2
L'Original:																
Males	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Females	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

BY COUNTY TOWNS, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases and causes not given.	Grand Total.
12	.....	.....	1	12	.....	11	13	.....	3	28	186
11	.....	.....	1	8	1	15	3	.....	3	22	188
23	.....	.....	2	20	1	26	18	.....	6	50	374
.....	.....	.....	.....	2	.....	4	1	.....	.....	3	32
.....	.....	.....	.....	.....	.....	3	.....	.....	.....	2	24
.....	.....	.....	.....	2	.....	7	1	.....	.....	5	56
.....	.....	.....	.....	2	.....	.....	2	.....	1	3	30
.....	.....	.....	.....	2	.....	1	.....	.....	.....	2	20
.....	.....	.....	.....	4	.....	1	2	.....	1	5	40
3	.....	.....	.....	2	.....	1	2	.....	.....	1	31
2	.....	.....	.....	.....	.....	4	.....	.....	.....	2	27
5	.....	.....	.....	2	.....	5	2	.....	.....	3	58
.....	.....	.....	.....	4	.....	2	.....	.....	.....	12	44
.....	.....	.....	.....	2	1	4	.....	1	.....	2	42
.....	.....	.....	.....	6	1	6	.....	1	.....	14	86
2	.....	.....	.....	1	.....	1	.....	.....	.....	7	40
.....	.....	.....	.....	.....	.....	4	.....	.....	1	6	40
2	.....	.....	.....	1	.....	5	.....	.....	1	13	80
.....	.....	.....	.....	3	.....	1	.....	2	.....	10	55
1	.....	.....	.....	2	1	2	.....	.....	.....	4	50
1	.....	.....	.....	5	1	3	.....	2	.....	14	105
1	.....	.....	.....	.....	.....	2	.....	.....	.....	11	59
1	.....	.....	1	2	1	5	.....	.....	.....	6	45
2	.....	.....	1	2	1	7	.....	.....	.....	17	104
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	6

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Picton :										
Males				1			1			
Females							1			1
Total				1			2			1
Pembroke :										
Males		1					1			
Females		2								
Total		3					1			
Barrie :										
Males										
Females		2		2		1		1	1	
Total		2		2		1		1	1	
Cornwall :										
Males				5		3				
Females				7						
Total				12		3				
Lindsay :										
Males				1			1			
Females						1	1			
Total				1		1	2			
Berlin :										
Males						2		1		
Females						2				
Total						4		1		
Welland :										
Males										
Females				1						
Total				1						
Guelph :										
Males				5		5	1			
Females			2	5		3	2			
Total			2	10		8	3			
Hamilton :										
Males				3		12	2			
Females		1		6		9	5	1	4	
Total		1		9		21	7	1	4	

BY COUNTY TOWNS, 1881—*Continued.*

Miasmatic.											Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
...	....	....	....	....	....	....	....	....	....	.....	.....	5	.....	.....	.....	1	4
...	....	1	....	1	...	....	2	....	....	.....	1	3	.....	.....	.....	1	1
...	....	1	..	1	....	....	2	....	.....	.....	1	8	.....	.....	.....	2	5
....	4	1	....	....	....	....	....	....	....	.....	.....	3	....	.....	.. ..	.....	.....
....	1	1	....	...	....	....	....	....	.....	.....	.....	4	.....	.....	.....	....	.....
...	5	2	....	...	....	....	....	....	.....	....	.....	7	.....	.....	.....	....	.....
....	3	....	....	....	....	1	....	....	.....	.....	1	5	.....	.....	.....	.....	1
....	1	....	....	....	....	1	....	....	1	.....	.....	6	.....	.....	.....	2	.....
....	4	....	....	...	....	2	....	...	1	.....	1	11	....	.....	.....	2	1
....	4	...	....	....	...	2	....	....	1	.....	.....	7	.....	.....	1	1	.....
2	3	....	..	....	....	1	....	...	.....	.....	.....	11	.....	.....	.....	1	.....
2	7	....	....	....	...	3	....	....	1	.....	.....	18	....	.. ..	1	2	.....
....	1	3	1	....	....	....	...	...	.....	.....	.....	8	.....	.....	.....	1	2
1	....	1	....	....	....	....	....	....	1	.....	.....	4	1	.....	.....	.....	1
1	1	4	1	....	....	....	....	....	1	.....	....	12	1	.....	.....	1	3
....	1	1	....	....	....	2	1	....	.....	.....	1	5	....	.....	.....	1	.....
1	3	....	....	....	1	4	....	1	.....	.....	1	3	....	....	.....	....	.. ..
1	4	1	....	...	1	6	1	1	.....	.....	2	8	.....	.....	.....	1	.....
....	...	1	...	....	...	...	....	....	.....	.....	.....	.....	1	....	.....	.....	1
....	....	1	....	....	....	....	....	....	1	.....	.....	2	.....	.....	.....	.....	...
....	....	2	....	....	....	....	..	....	1	.....	...	2	1	.....	.....	.....	1
1	4	1	2	....	....	2	....	1	4	.....	.....	18	.....	....	.....	2	3
2	4	1	....	....	1	....	3	....	1	.....	4	10	.....	.....	.....	3	1
3	8	2	2	...	1	2	3	1	5	.....	4	28	.....	.. ..	.....	5	4
2	19	15	3	1	4	11	....	....	9	.. ...	2	28	.....	.....	1	4	7
1	17	2	1	2	5	12	6	....	4	.....	8	30	2	.....	.....	7	6
3	36	17	4	3	9	23	6	....	13	.....	10	58	2	.....	1	11	13

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Picton :																
Males	....	....	....	....	1	....	....	2	....	....	....	....	....	....	....	....
Females	....	....	....	....	2	....	....	....	....	....	....	....	2	....	....	....
Total	....	....	....	....	3	....	....	2	....	....	....	....	2	....	....	....
Pembroke :																
Males	....	....	2	....	3	1	1	....	....	....	....	....	4	....	1	1
Females	....	....	1	1	....	1	....	....	....	....	1	....	4	....	....	1
Total	....	....	3	1	3	2	1	....	....	....	1	....	8	....	1	2
Barrie :																
Males	1	....	2	1	....	....	....	....	1	....	1	....	1	....	....	....
Females	....	....	1	....	1	....	....	1	....	1	2	....	1	....	....	1
Total	1	....	3	1	1	....	....	1	1	1	3	....	2	....	....	1
Cornwall :																
Males	....	1	....	1	....	....	....	....	1	....	....	....	5	....	....	....
Females	....	....	....	1	3	....	....	....	....	1	....	....	....	....	....	1
Total	....	1	....	2	3	....	....	....	1	1	....	....	5	....	....	1
Lindsay :																
Males	....	....	....	1	3	....	..	1	1	....	....	....	2	....	1	1
Females	....	....	1	2	1	1	2	1	....	....	....	....	2	....	....	1
Total	....	....	1	3	4	1	2	2	1	....	....	....	4	....	1	2
Berlin :																
Males	....	....	1	3	1	4	....	1	....	....	2	....	1	1	....	....
Females	....	1	1	....	1	....	....	....	....	....	3	....	1	....	....	1
Total	....	1	2	3	2	4	....	1	....	....	5	....	2	1	....	1
Welland :																
Males	....	....	....	....	3	....	....	....	....	1	....	....	....	....	1	....
Females	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	4	....	....	....	....	1	....	....	....	....	1	....
Guelph :																
Males	....	....	3	3	....	2	....	2	....	....	1	....	3	....	....	1
Females	....	1	4	1	3	....	....	1	....	....	2	....	2	....	....	1
Total	....	1	7	4	3	2	..	3	....	....	3	....	5	....	....	2
Hamilton :																
Males	....	....	17	10	7	7	7	4	....	1	12	1	21	1	1	8
Females	2	....	17	8	8	6	6	2	....	1	9	....	12	....	2	2
Total	2	....	34	18	15	13	13	6	....	2	21	1	33	1	3	10

BY COUNTY TOWNS, 1881—*Continued.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other diseases and causes not given.	Grand Total.
						1	1			6	23
1										3	29
1						1	1			9	43
						1	1			6	31
							1				18
						1	2			6	49
				1						7	26
2			1			1				4	34
2			1	1		1				11	60
1			1	2		5				9	50
			1	1	1				1		35
1			2	3	1	5			1	9	85
1				1		1	1	1		4	37
1				1		5				6	35
2				2		6	1	1		10	72
2				1		3		1			36
			2	3	1	8		1		2	41
2			2	4	1	11		2		2	77
1				1					1	6	17
				1	1					1	9
1				2	1				1	7	26
6				7		2	3		1	15	98
3				6		8				11	85
9				13		10	3		1	26	183
37				23		6	4	1	1	43	335
27			2	23		13			5	39	313
64			2	46		19	4	1	6	82	48

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Miasmatic.									
	Small Pox.	Measles.	Inflammation.	Diphtheria.	Quinsy.	Croup.	Whooping Cough.	Erysipelas.	Metria.	Influenza.
Toronto:										
Males	..	2	.....	23	.....	21	9	3	....	....
Females	.....	.....	.....	21	.....	17	4	7	9	....
Total	.....	2	.....	44	..	38	13	10	9	...
Total Males	.....	9	7	115	.....	79	26	14	....	4
Total Females	.....	9	12	136	2	73	35	17	22	7
Total	....	18	19	251	2	152	61	31	22	11

BY COUNTY TOWNS, 1881—*Concluded.*

Miasmatic.										Tubercular.				Nervous System.			
Dysentery.	Diarrhœa.	Cholera Infantum.	Cholera.	Gastritis.	Remittent Fever.	Typhoid Fever.	Rheumatism.	Fever.	Scarlet Fever.	Scrofula.	Cancer.	Phthisis.	Hydrocephalus.	Cephalitis.	Cerebro-Spinal Meningitis.	Apoplexy.	Paralysis.
6	47	33	2	8	1	31	5	1	3	.....	8	85	12	.....	2	18	19
6	62	29	1	6	1	26	1	1	6	.....	15	89	6	.....	2	21	18
12	109	62	3	14	2	57	6	2	9	.....	23	174	18	.....	4	39	37
22	170	97	12	13	7	98	15	9	51	3	32	324	40	.....	10	49	69
29	160	63	7	17	12	74	25	15	53	6	61	353	44	.....	5	63	56
51	330	160	19	30	19	172	40	24	104	9	93	677	84	.....	15	112	125

TABLE I.—CAUSES OF DEATH

COUNTY TOWNS.	Nervous System.									Respiratory Organs.						
	Insanity.	Epilepsy.	Heart Disease.	Convulsions.	Brain Disease.	Enteritis.	Meningitis.	Dropsy.	Intemperance.	Laryngitis.	Bronchitis.	Pleurisy.	Pneumonia.	Asthma.	Lung Disease.	Congestion of Lungs.
Toronto :																
Males	2	3	36	39	25	9	9	4	7	1	33	1	45	1	5	19
Females	1	3	38	36	18	9	6	14	4	3	23	3	36	3	9	10
Total	3	6	74	75	43	18	15	18	11	4	56	3	81	4	14	29
Total Males	4	7	144	96	94	44	24	38	18	5	90	4	155	8	13	57
Total Females	3	6	119	86	80	26	19	55	5	8	63	3	115	5	18	42
Total	7	13	263	182	174	70	43	93	23	13	153	7	270	13	31	99

Registrar General's Office,
Toronto, December, 1882.

BY COUNTY TOWNS, 1881.—*Concluded.*

Developmental Diseases of Children.					Developmental Diseases of Women.	Developmental Diseases of Old People.					
Infantile Premature.	Worms.	Malformation.	Teething.	Infantile Debility.	Childbirth.	Old Age.	Accident.	Kidney Disease.	Liver Disease.	Other Diseases, and causes not given.	Grand Total
54	.....	.....	5	64	.....	25	16	8	13	116	879
40	.....	.....	3	44	5	43	5	13	14	81	811
94	.....	.....	8	108	5	68	21	21	27	197	1690
145	.....	.....	35	238	.....	130	100	23	27	488	3262
107	.....	.....	35	194	23	196	31	19	30	350	3004
252	.....	.....	70	432	23	326	131	42	57	838	6266

H. S. CREWE,
Inspector.

TABLE K.—DEATHS

COUNTIES.	Agents.		Artists.		Brickmakers.		Blacksmiths.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay								
Brant							2	101
Bruce	3	135					1	33
Carleton							3	190
Dufferin								
Elgin	1	31	1	24			1	31
Essex	1	26					5	323
Frontenac	1	74					2	103
Grey	1	61			1	55	3	211
Haldimand							1	54
Halton							5	274
Hastings	1	67						
Huron							3	141
Kent	1	68					4	163
Lambton	2	102					4	190
Lanark							2	120
Leeds and Grenville							3	166
Lennox and Addington							1	54
Lincoln	2	124					2	145
Middlesex	1	39					1	61
Muskoka and Parry Sound								
Norfolk							1	69
Northumberland and Durham	1	55					3	167
Ontario			1	44			2	93
Oxford			1	29			1	32
Peel							3	142
Perth								
Peterborough							2	112
Prescott and Russell								
Prince Edward	1	42					2	49
Renfrew							2	53
Simcoe	1	39			1	50	2	151
Stormont, Dundas and Glengarry							6	307
Victoria							1	34
Waterloo					1	23	2	125
Welland								
Wellington	2	115					5	217
Wentworth	1	64	1	29			4	207
York	10	429					3	125
Total	30	1471	4	126	3	128	82	4243

BY OCCUPATIONS, 1881.

Brewers and Distillers.		Bricklayers.		Barbers.		Butchers.		Book-keepers and Clerks.		Bankers.		Bakers and Confectioners.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
		1	53	1	40			2	90			1	47
						1	100						
								3	129				
						1	52					1	33
				1	82								
						1	26						
						1	42						
				1	23	1	47	1	54				
				1	37					1	41	1	62
						1	27						
		1	70	1	23	1	36			1	22	1	64
								1	62				
2	81	3	134			2	126	1	21	1	61	1	76
1	70					4	151	1	29	2	96	4	105
1	78			1	65	2	101	1	75			1	50
		1	40	2	98			1	30				
1	50							2	82	2	56	1	40
		2	113					2	65	1	30		
								1	29				
						1	65	2	106				
1	70					1	61			1	60		
				1	35			1	24				
1	46							3	99				
						1	54			2	128	4	152
				1	37			3	155				
6	315	4	261	1	45	2	73	25	994	2	104	2	71
13	710	12	671	11	485	20	971	50	2044	13	598	17	700

TABLE K.—DEATHS BY

COUNTIES.	Carpenters.		Cabinet-makes		Coopers.		Cooks.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay	1	65						
Brant	5	270	4	280				
Bruce	3	133			1	32		
Carleton	6	325	1	22	1	71		
Dufferin	2	62			2	119		
Elgin	1	46	1	40				
Essex	4	178			1	69		
Frontenac	2	153					1	81
Grey	4	257			1	32		
Haldimand	2	122	1	40				
Halton	2	66					1	45
Hastings	7	338			1	45		
Huron	5	359	1	86	1	35		
Kent	2	53	1	45				
Lambton	5	263						
Lanark	2	166						
Leeds and Grenville	7	344						
Lennox and Addington	3	168	2	112				
Lincoln	3	158	1	76				
Middlesex	13	792	5	170	1	65		
Muskoka and Parry Sound								
Norfolk	2	117						
Northumberland and Durham	5	297	1	40	1	60		
Ontario			2	58	3	185		
Oxford	5	302			1	74		
Peel	1	54						
Perth	4	141			1	88		
Peterborough	3	149	1	66	1	67		
Prescott and Russell	1	72						
Prince Edward	5	264						
Renfrew								
Simcoe	3	169						
Stormont, Dundas and Glengarry	2	121						
Victoria	1	81			2	85		
Waterloo	10	543			1	75		
Welland	3	137						
Wellington	10	532	2	74				
Wentworth	4	152	2	90	1	49	1	34
York	21	1064	2	83	3	173	1	27
Total	159	8503	27	1282	23	1324	4	187

OCCUPATIONS, 1881—*Continued.*

Chemists and Druggists.		Clergymen.		Contractors and Builders.		Carriage and Waggon Makers.		Dentists.		Engineers.		Editors.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
1	26			1	44								
1	64					3	192						
1	25	2	157	1	31	4	182						
		1	48	2	112							2	77
						1	51						
				1	39	1	57			1	50		
		1	69			2	62			3	145		
1	63	1	83			1	49			1	45		
		1	72	1	68	3	205			1	45		
		1	72										
		1	84	2	130	1	62	1	32	2	75		
1	52					1	69						
		1	40	1	67	1	21	1	35				
1	38	1	53	2	79					2	52		
						1	49						
1	61	3	203			2	125			2	79		
		1	29										
		1	56			1	33			3	117		
1	39	1	63			1	26	1	54	1	24		
		1	59										
2	105	3	168			2	77						
		2	84			3	89						
		1	47			1	72						
										1	65		
		1	65										
1	65	1	59			1	56						
		1	58										
		1	71										
						2	61						
3	91	3	173	1	67	1	45			2	59		
1	39					2	57			3	150		
1	28	9	577	5	303	1	25			6	276		
16	796	39	2390	17	940	36	1665	3	121	28	1182	2	77

TABLE K.—DEATHS BY

COUNTIES.	Farmers.		Farmers' Wives.		Gardeners.		Gentlemen.	
	No.	Total Ages.	No.	Total Ages.	o.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay	11	502	2	109	1	71	.....	.....
Brant	40	2322	20	1029	2	154	4	282
Bruce	69	2421	74	4304	.....	.....	3	218
Carleton	69	4324	43	2446	1	55	4	279
Dufferin	28	919	23	1588	.....	.....	.....	.....
Elgin	51	3395	45	2759	2	178	2	155
Essex	70	4001	55	3120	.....	.....	5	345
Frontenac	66	4051	44	2801	.....	.....	6	452
Grey	65	4102	70	3954	.....	.....	1	82
Haldimand	46	3011	34	2115	.....	.....	.....	.....
Halton	30	2005	22	1378	1	27	5	372
Hastings	83	5132	53	3318	.....	.....	8	536
Huron	118	7186	105	6047	1	58	8	560
Kent	83	5228	54	2934	1	43	8	570
Lambton	65	3734	50	2715	.....	.....	6	397
Lanark	54	3599	49	3221	.....	.....	1	83
Leeds and Grenville	113	7464	73	4499	1	45	5	216
Lennox and Addington	50	3457	42	2084	.....	.....	5	342
Lincoln	54	3100	6	358	1	61	10	664
Middlesex	145	8782	101	6063	3	243	16	1267
Muskoka and Parry Sound	23	1163	17	791	.....	.....	.....	.....
Norfolk	65	3809	43	2662	.....	.....	3	188
Northumberland and Durham	112	7032	73	4325	2	113	9	619
Ontario	79	5034	40	2588	.....	.....	19	1431
Oxford	78	4949	87	5020	.....	.....	9	552
Peel	30	1842	21	1385	1	42	4	329
Perth	79	5017	64	3714	1	62	9	562
Peterborough	40	2375	22	1165	.....	.....	7	496
Prescott and Russell	59	3454	42	2661	.....	.....	1	86
Prince Edward	41	2293	30	1967	.....	.....	4	269
Renfrew	46	2819	34	2047	.....	.....	.....	.....
Simcoe	77	2704	61	3765	2	135	1	83
Stormont, Dundas and Glengarry	94	6433	68	5325	.....	.....	2	96
Victoria	48	2793	50	3094	.....	.....	8	557
Waterloo	53	3049	63	3871	.....	.....	10	730
Welland	40	2433	44	2554	.....	.....	2	120
Wellington	108	6759	104	5988	3	160	10	723
Wentworth	58	3604	63	3668	3	161	10	711
York	79	4860	59	3387	2	141	21	1514
Total	2519	151097	1950	116610	28	1749	228	15879

OCCUPATIONS, 1881—*Continued*

Hunters and Fishermen.		Housewives.		Labourers.		Lumbermen.		Lawyers.		Milliners and Dressmakers.		Masons.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.		Total Ages.	No.	Total Ages.
		12	698									2	53
		44	2006	16	885					2	82	1	88
		29	1429	5	248	1	36			2	61		
		73	4015	49	2315	2	93	3	158	1	50	2	100
		7	291	1	61			1	36			1	76
		21	1006	9	545								
1	40	57	2755	31	1498			1	81				
2	143	79	4824	28	1726	4	99			5	164		
		29	1597	4	226			1	39			1	74
		11	528	7	373					1	35	1	68
		16	791	8	375					1	22	2	145
		62	2516	24	1285	1	50	2	95			1	77
		48	2538	20	971					3	116		
		48	2308	18	830								
1	25	62	2810	16	671	1	28			1	21		
		13	814	1	50	1	23			1	28	1	78
		76	4234	21	1311							2	176
1	29	22	1056	7	350								
		59	3312	26	1340								
		153	7821	48	2582					4	99		
1	30	13	529	8	409	1	32			2	246	1	40
		34	1754	12	659			2	99	1	50	1	82
1	35	53	2747	28	1525			2	113				
		75	3932	20	1207			1	47	1	31		
		37	1834	13	788	1	23	2	87				
		37	2168	11	550								
		51	2386	16	833							1	46
		30	1918	14	618	1	56					1	35
1	65	17	794	8	523								
		36	1803	7	334							1	50
		17	944	12	627							1	63
1	49	40	1962	22	1048			1	33	1	28	2	135
		47	2768	23	1088			1	66	1	26	3	159
		32	1547	17	696					1	28		
		66	3486	20	1160							6	429
		50	2765	24	1233							1	89
		76	3967	20	919					1	22	1	44
		173	9346	47	2780			1	35	1	26	4	278
2	109	327	18116	110	5774			4	161	2	52	1	63
11	525	2132	112145	771	40413	13	440	22	1050	32	987	37	2438

TABLE K.—DEATHS BY

COUNTIES.	Machinists.		Moulders.		Millers.		Millwrights.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay								
Brant			1	36			1	68
Bruce							1	85
Carleton					3	237	1	27
Dufferin								
Elgin					1	91	1	63
Essex	1	22			1	48		
Frontenac	2	48						
Grey								
Haldimand	1	56						
Halton	1	24			2	107		
Hastings	1	40			2	122		
Huron								
Kent					2	54		
Lambton								
Lanark					3	192		
Leeds and Grenville	1	25	1	24			1	86
Lennox and Addington					1	55		
Lincoln	1	28					1	69
Middlesex			2	85	4	219		
Muskoka and Parry Sound							1	35
Norfolk								
Northumberland and Durham			1	35	1	82		
Ontario			1	57				
Oxford	1	35			2	128		
Peel								
Perth	3	121			1	50		
Peterborough	1	25			1	56		
Prescott and Russell								
Prince Edward					1	27		
Renfrew								
Simcoe					1	49	1	64
Stormont, Dundas and Glengarry	1	43					1	42
Victoria								
Waterloo	1	58			1	27		
Welland								
Wellington	2	132					1	46
Wentworth	4	225	3	109	1	77		
York	2	78	1	59	2	85		
Total	23	960	10	405	30	1706	10	585

OCCUPATIONS, 1881—*Continued.*

Musicians.		Manufacturers.		Merchants.		Other Occupations.		Other Mechanics.		Painters.		Printers.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
1	35							2	51	2	90		
				3	158					1	27		
				5	248	3	187			3	85	4	111
										1	23		
				2	81			2	60			1	59
				3	188								
1	44			6	298								
				2	137			1	26				
										1	50		
		3	132	5	283								
1	60	2	81	3	159							1	24
				6	337	3	137	4	125	1	57	1	36
				5	239	5	229			1	36		
				5	259	1	45	2	138	1	63		
				4	255			2	119	1	58		
		2	65	5	219	5	335	6	351	1	54		
				3	126			1	72				
		2	86	7	320	3	211	3	107			1	26
3	187	1	45	11	560	3	107	6	223			1	21
		1	66	2	78								
				5	256			1	49	2	77		
				5	230	1	27	1	81			2	111
				2	74			1	48	1	34		
				2	125	9	462	1	76	1	43		
						1	20	1	59				
1	25			3	167	4	209	1	22				
						2	63						
				2	138								
		1	62	1	30			2	102				
		1	43	4	203					2	129		
				1	45	2	162	3	156	1	32	1	24
				3	168	3	132	1	52			1	68
		1	65	2	101	4	250					1	28
		1	56	1	41	1	47						
				5	227	2	76			1	28	1	21
1	23			10	515	14	723	3	121	2	109	2	54
1	25	5	214	20	1057	37	1874	4	152	4	175	3	144
9	399	20	915	143	7322	103	5305	48	2190	27	1170	20	727

TABLE K.—DEATHS BY

COUNTIES.	Stonecutters.		Shoemakers.		Sailors.		Saddlers and Harness-makers.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay					2	69		
Brant								
Bruce			1	67	2	81		
Carleton			4	228			1	77
Dufferin							1	56
Elgin			2	121			1	49
Essex			5	344				
Frontenac	1	63	3	165	5	224		
Grey					1	28		
Haldimand			1	36				
Halton			4	255				
Hastings			1	66	2	72	1	22
Huron			6	340				
Kent			1	35				
Lambton			2	98				
Lanark			2	92				
Leeds and Grenville			4	276	1	79		
Lennox and Addington							2	47
Lincoln			1	32	4	149		
Middlesex	1	29	5	338				
Muskoka and Parry Sound								
Norfolk			2	146	3	177		
Northumberland and Durham			3	209				
Ontario			7	408				
Oxford	1	29	1	69			1	39
Peel	1	66	2	155				
Perth			2	85				
Peterborough			4	194			1	76
Prescott and Russell								
Prince Edward			1	84				
Renfrew							1	71
Simcoe			3	251	1	54	1	32
Stormont, Dundas and Glengarry			2	94				
Victoria			1	83				
Waterloo			3	140	1	51	1	29
Welland	1	24			1	67		
Wellington	1	58	5	260			1	46
Wentworth	1	39	5	240	1	42		
York	2	103	10	661	5	236	1	40
Total	9	411	93	5572	29	1329	13	584

OCCUPATIONS, 1881—*Continued.*

Seamstresses.		Servants.		Tinsmiths.		Teamsters.		Tavern-keepers.		Tobacconists and Cigarmakers.	
o.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
								1	50		
2	44	4	96	1	31	2	99			1	24
		1	86								
		4	213					1	62		
								2	74		
1	34			1	64	1	60	6	239		
2	51	6	274			2	140	2	80		
		1	70	1	72						
								1	25		
		1	30			1	53	2	71		
								3	135		
		4	98			2	78	3	165		
		3	75			3	20	1	45		
2	101										
		2	108					3	196	1	22
								1	36		
				1	26						
1	66	5	167			3	151	6	297		
		1	25					1	73		
2	96	1	41					1	48		
		2	50					1	32		
		1	85			1	47	3	135		
		1	79			1	30	2	122		
		2	51					3	148		
		1	46			1	33	2	96		
		1	82								
								1	63		
1	54										
		1	37								
		1	26					2	142		
		3	87					3	105		
		1	53	1	55			2	96		
1	69			1	87			3	160		
3	75	7	345	2	62	2	75	3	119	3	110
1	50	36	1497			5	204	4	160	3	81
16	640	90	3721	8	397	24	1090	63	2974	8	237

TABLE K.—DEATHS BY

COUNTIES.	Teachers.		Telegraph Operators.		Tailors.		Tanners and Curriers.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay								
Brant					1	80		
Bruce	5	122			1	41		
Carleton	2	118			1	59	2	142
Dufferin	1	27						
Elgin	1	34						
Essex	2	55			1	65		
Frontenac					2	104	1	87
Grey	2	115						
Haldimand	1	74			2	100		
Halton	1	25			2	150		
Hastings	3	235						
Huron	6	140						
Kent							1	65
Lambton					1	80		
Lanark	2	118					1	70
Leeds and Grenville	3	115			1	178		
Lennox and Addington	1	43			1	28		
Lincoln					1	73		
Middlesex	5	149			3	173		
Muskoka and Parry Sound	2	70					1	32
Norfolk					1	36		
Northumberland and Durham	3	78	1	28				
Ontario	1	71					2	102
Oxford	3	119			2	153		
Peel	1	21			1	78		
Perth					1	27	1	59
Peterborough					3	152		
Prescott and Russell	1	40						
Prince Edward	1	85			3	122		
Renfrew								
Simcoe	3	103			1	22		
Stormont, Dundas and Glengarry	2	62					1	40
Victoria	2	68			1	39		
Waterloo	1	24			4	131		
Welland								
Wellington					2	123		
Wentworth	5	276	1	24	3	196		
York	8	346	1	23	7	383		
Total	68	2733	3	75	46	2493	10	597

OCCUPATIONS, 1881—*Continued.*

Undertakers.		Volunteers, Soldiers and Pensioners.		Watchmakers and Jewellers.		Weavers.		Miners.		Physicians.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
								3	183	1	46
		1	50			1	68				
		1	78			3	232			2	93
				1	28					1	57
						1	76			1	46
		4	280							1	49
		6	358			1	90			2	108
		1	81			2	129			1	73
				1	21			1	73	1	41
										2	101
				1	25						
		1	88								
		1	88			4	242				
		2	151			1	85	1	33	2	79
		1	86			1	78			2	100
		2	163			1	21			1	61
		12	742			3	222				
		1	87								
										1	56
		3	270							1	65
		1	50	1	57			1	60	1	84
						1	60			3	154
						2	165				
1	54			1	54	1	70				
		1	76							4	203
						1	72				
										1	42
						2	131			1	26
		1	77	1	35					2	110
		1	92	1	46	3	199				
				1	42						
						3	172				
		1	62								
						1	70				
		2	144	2	99	3	146			1	33
		11	703	2	153	2	113			7	330
	54	54	3726	12	560	37	2441	6	349	39	1957

TABLE K.—DEATHS BY

COUNTIES.	Railway Employees.		Sawyers.		Public Officials.		Provincial Land Surveyors.	
	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.
Algoma and Thunder Bay	1	30						
Brant	2	98	1	27	2	99	1	79
Bruce					1	25		
Carleton					15	853		
Dufferin								
Elgin	5	176			2	84	1	76
Essex								
Frontenac	1	50			3	123		
Grey								
Haldimand	1	25			1	67		
Halton	1	30	1	39	3	224		
Hastings	1	65			3	144		
Huron								
Kent	1	24	1	29	2	122		
Lambton	3	95						
Lanark								
Leeds and Grenville	4	156			3	204		
Lennox and Addington	1	22						
Lincoln					2	144	1	47
Middlesex	5	247			4	229		
Muskoka and Parry Sound					2	92		
Norfolk	1	32			1	55		
Northumberland and Durham			2	91	4	236		
Ontario	3	107	2	110	4	217	1	62
Oxford								
Peel								
Perth	3	129						
Peterborough	2	53						
Prescott and Russell								
Prince Edward								
Renfrew					1	25		
Simcoe	2	76	1	30				
Stormont, Dundas and Glengarry	6	171			6	310		
Victoria								
Waterloo					1	66		
Welland	4	157			4	242		
Wellington			1	23	2	116		
Wentworth	1	94			2	103		
York	10	489			9	627	1	73
Total	58	2326	9	349	77	4407	5	337

REGISTRAR-GENERAL'S OFFICE,

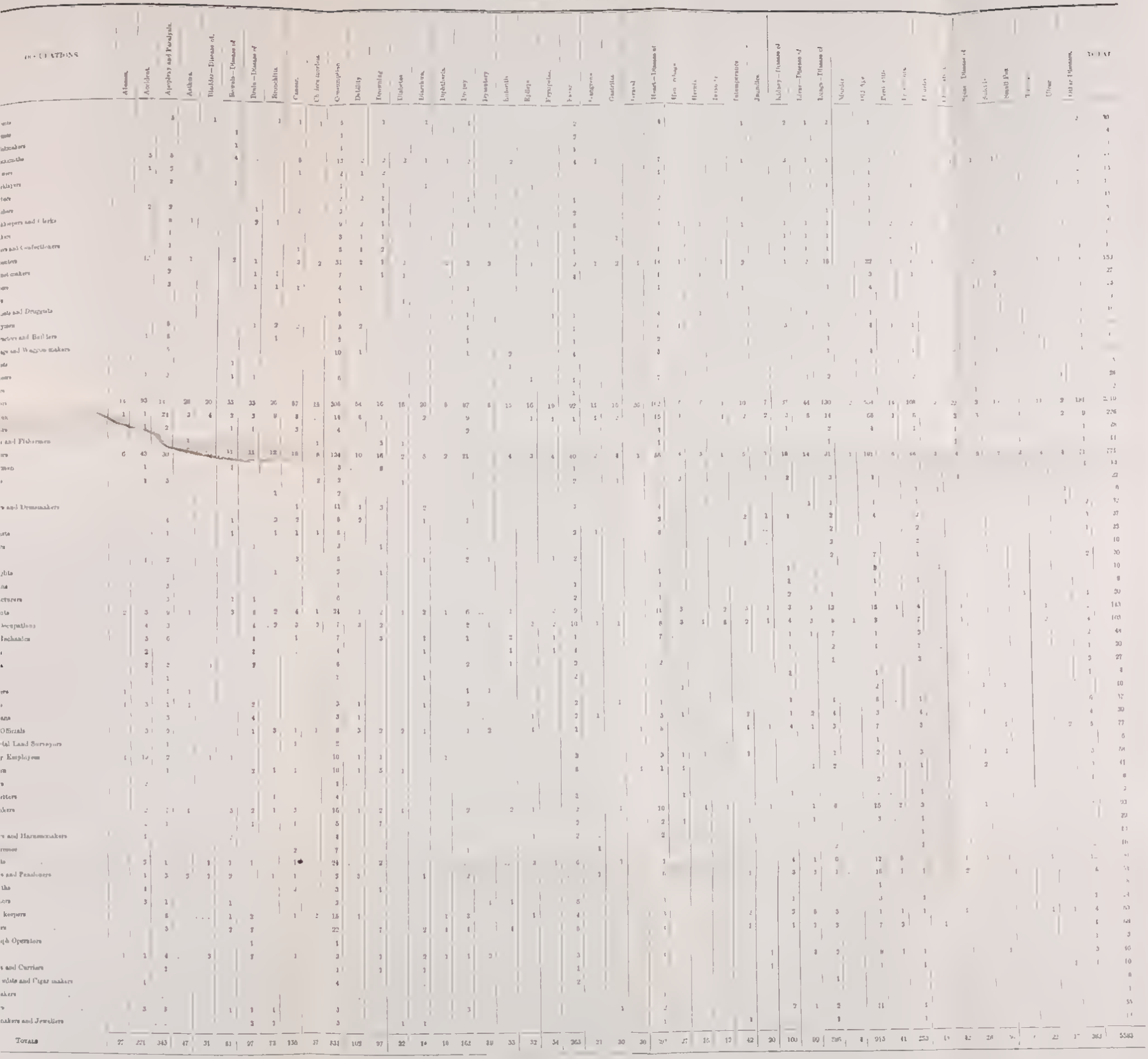
TORONTO, December, 1882.

OCCUPATIONS, 1881—*Concluded.*

Plasterers.		Salesmen and Clerks.		Paupers.		Pedlars.		Total Number of Deaths.	Total Ages.	
No.	Total Ages.	No.	Total Ages.	No.	Total Ages.	No.	Total Ages.		Aggregate.	Average.
								38	1937	50·97 years.
1	77							176	9137	51·91 "
1	65	3	109	1	83			227	10897	48·00 "
1	43	3	127			1	22	322	17733	55·07 "
1	57							74	3573	48·28 "
				8	525	2	95	169	9944	58·84 "
				1	75			265	14235	53·71 "
		10	343					301	17643	58·61 "
		1	31					201	11868	59·04 "
				3	237			117	7078	60·49 "
								117	6811	58·21 "
		1	32	4	312			286	15689	54·85 "
								347	19656	56·64 "
		2	63	1	69			259	13867	53·54 "
		1	47	1	42			245	12400	50·61 "
		1	29					150	9617	64·11 "
1	67	3	118					367	22042	60·06 "
		1	26					151	9062	60·01 "
				1	60			207	11451	55·31 "
		8	279	5	366			609	33688	55·31 "
								79	3608	45·67 "
								192	10986	56·75 "
1	36	2	79	1	76			337	19462	57·75 "
		1	23					281	16377	58·28 "
								275	15718	57·15 "
								122	7277	59·64 "
						1	48	261	14471	55·44 "
								144	8131	56·46 "
								135	7433	55·05 "
				2	122	1	80	142	7881	55·50 "
								121	7014	57·93 "
								249	12168	48·86 "
1	32							289	18348	63·48 "
2	111							176	9749	55·39 "
				14	953			276	15792	57·21 "
								182	10231	56·21 "
								389	21831	56·12 "
1	69			1	46	1	94	474	26059	54·97 "
		4	170	3	204	2	124	924	49783	53·87 "
10	557	41	1476	46	3161	8	463	9676	540647	56· years nearly.

H. S. CREWE,
Inspector.

TABLE L. DEATHS BY OCCUPATIONS—CAUSES OF DEATH, 1881



REGISTRAR-GENERAL'S OFFICE,
TORONTO, December, 1882.

H. E. CREWE,
Inspector.

ANNUAL REPORT

OF THE

INSPECTOR

OF

DIVISION COURTS

FOR THE

PROVINCE OF ONTARIO,

FOR THE YEAR 1881.

Printed by Order of the Legislative Assembly.

Toronto:
PRINTED BY C. BLACKETT ROBINSON, 5 JORDAN STREET.
1883.

ANNUAL REPORT

OF THE

INSPECTOR OF DIVISION COURTS

FOR THE

PROVINCE OF ONTARIO,

FOR THE YEAR 1881.

OFFICE OF THE INSPECTOR OF DIVISION COURTS,
PARLIAMENT BUILDINGS, TORONTO, *December*, 1882.

TO THE HONOURABLE JOHN BEVERLEY ROBINSON, LIEUTENANT-GOVERNOR OF THE PROVINCE OF ONTARIO.

May it please your Honour :

I have the honour to submit the following report on the Division Courts for the year ending on the 31st day of December, 1881 :—

The returns received from the Clerks of these Courts, in pursuance of section 30 of the Division Courts Act, 1880, showing the business of each Court, have been carefully tabulated and are hereto annexed as Table A. These returns show a marked decrease in the business as compared with the year 1880, and for the convenience of any one referring to this feature of the report, I have given the totals for the year 1880 under those of 1881 in the first eight items of the table. The remaining eight items not being for the full year in 1880 a further comparison is not practicable.

Under the increased jurisdiction given to these Courts by the Act of 1880, four thousand one hundred and sixty-eight suits were entered during the year, that otherwise, if sued at all, must have gone to higher Courts. This number of suits under the increased jurisdiction is strong evidence that business men and the public generally gladly avail themselves of the privilege offered by this inexpensive and expeditious mode of collecting

debts ; and so far as I can learn the evils which it was feared by some would result from the change have not been experienced to any great extent.

Notwithstanding the number of suits added by the increased jurisdiction the total number of suits entered for the year (exclusive of transcripts of judgments from other Courts) is nineteen thousand five hundred and thirty-one less than the number similarly entered in the year ending on the 30th day of November, 1877. And although three thousand seven hundred and forty-four of the suits entered in 1881 were for amounts exceeding one hundred dollars, the total amount of claims entered for suit in the last named year (exclusive of transcripts of judgments from other Courts) is one hundred and fifty-nine thousand nine hundred and twenty-six dollars and thirteen cents less than those similarly entered in the year ending on the 30th day of November, 1877.

The officers of the Courts have felt the effects of this decrease in the business upon their emoluments of office, and very many of them find it necessary to combine some other pursuit or business with the work of their office to enable them to live.

Having discovered a tardiness on the part of some Clerks to inform the persons entitled to receive moneys out of Court as soon as collected, I sent a copy of the following circular to each Clerk by mail.

OFFICE OF THE INSPECTOR OF DIVISION COURTS,
PARLIAMENT BUILDINGS, TORONTO, 25TH JULY, 1881.

SIR,—Recent Inspections have disclosed the fact that all Division Court Clerks are not carrying out the provisions of the law regarding moneys received by them for any party to a suit as defined by section 56 of the "Division Courts Act, 1880."

Rule 95, in force since the 2nd day of August, 1869, was intended to prevent the abuse by Clerks of these Courts of holding suitors' moneys, after they had been collected, without the knowledge of the party entitled to receive the same ; but, in practice, it was found that something further was necessary to secure compliance in every case.

It is believed that in section 56 of the above Act, the duties of Clerks in this respect are made sufficiently clear and definite to prevent the possibility of being misunderstood, while a full compliance with the section affords at once the evidence that the duty has been performed. Under these circumstances, I deem it best to at once notify all Clerks that the failure to comply with the requirements of this section, except in cases where the party entitled to the notice has first filed with the Clerk a waiver in writing, will subject the party so offending to be reported to the Government as having failed in the discharge of one of the most important duties of his office.

Your obedient servant,

J. DICKEY,
Inspector of Division Courts.

In former reports I have had occasion to mention the fact that in the earlier years of this Inspection many officers were to be found without the proper books in which to record the business of the Court, and the very general absence of anything like a proper cash account. The contrast between the officers then and now is very striking. Now these officers are well provided with books proper for the purpose, and full and complete records are kept. The cash account is to be found in a book that not only serves as a debit and credit account but also shows the receipt given for moneys paid out of Court, and also to whom any balance remaining in Court properly belongs. The officers are

required to enter the items of cost in each suit in detail, so that the charges can be taxed in a very few minutes in any suit, and by this practice Clerks have become familiar with the tariff of fees and have learned to exercise their own judgment as to what should and what should not be charged. This is a great improvement on the practice that predominated at one time when Clerks in many offices were in the habit of giving the costs in bulk sum, and relied on a neighbouring Clerk (very often the Clerk of the County Town Office) for the information upon which they based their charges.

The Clerks and Bailiffs now are better read and better informed as to their respective duties, and have better facilities for acquiring the knowledge necessary to a proper discharge of their duties than at any previous time in the history of these Courts. These advantages and improvements are all in the interest of suitors, and it is admitted by legal gentlemen, and others having business with the Courts, that there is not nearly the difficulty in getting their business properly done, or moneys paid over when collected, that existed formerly.

Constant attention and watchfulness is necessary to still further improve and keep up the amended character of the Division Courts in the particulars named, and in others in the relations of officers to suitors.

It is believed that it will assist the business of these Courts to publish the names and Post Office address of the several Clerks and Bailiffs, and to this end I append a list of these officers up to the date of writing.

I have the honour to be,

Your Honour's obedient servant,

J. DICKEY,
Inspector of Division Courts.

TABLES.

TABLE A.

RETURN of Division Court Business from the First day of January, A.D. 1881, to the Thirty-first day of December, A.D. 1881, inclusive, showing—

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Division.	The number of Suits entered in Court exclusive of Transcripts of Judgment and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of Actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Juries Summoned.	The amount paid to Jurors Summoned.	The number of Jury Trials by Jurors called in pursuance of Section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Court Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
ALGOMA DISTRICT.....	1	15	769 47	4	319 61	.....	270 34	270 31	1	.....	.....	.....	.....	.....	0 25	.....
	2	41	1870 60	8	279 72	.....	1211 03	1211 03	4	.....	.....	.....	.....	.....	1 90	.....
	3	26	757 07	6	213 65	1	397 60	478 10	1	.....	.....	.....	.....	.....	0 76	.....
	4	161	4695 67	6	51 68	16	2078 46	2071 15	6	3	.....	.....	.....	.....	4 47	.....
	5	53	1879 61	7	219 49	2	821 47	730 41	6	.....	.....	.....	.....	.....	1 50	.....
	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
BRANT.....	1	361	14921 79	36	1318 36	54	5614 58	5441 14	28	2	.....	3	29 00	.....	15 73	.....
	2	82	3127 09	11	466 09	11	1476 07	1476 07	4	.....	.....	.....	.....	1	2 77	.....
	3	48	1448 76	13	749 35	3	999 05	868 11	4	.....	.....	.....	.....	.....	1 66	.....
	4	95	3262 81	10	361 08	3	1482 68	1258 63	4	.....	.....	.....	.....	.....	2 89	.....
	5	21	542 72	6	293 78	4	395 47	455 07	.....	.....	.....	.....	.....	.....	0 42	.....
	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

RETURN of Division Court Business from the First day of January, A.D. 1881, to the Thirty-first day of December, A.D. 1881, inclusive, showing—

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Counties, in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments, from other Counties, in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court, in each County, United Counties or District.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $10, in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of "Jury Trials by Jurors, called in pursuance of Section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Court Jury Fund" in each County, United Counties or District.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
ALGOMA DISTRICT	5	296		31	1084 15	13	4778 90	4761 00	18	3		3	29 00	1	8 88	.....
BRANT	6	607	9972 42	76	3128 06	75	9877 85	9539 02	40	2	.....	3	29 00	1	23 47	.....
Carried forward	11	903	33275 59	107	4212 81	88	14656 75	14300 02	58	5	.....	6	58 00	2	32 35	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgment and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of Actions of Replevin where the value of the Goods or other property or effects distrained, taken or detained exceeds the sum of $10.	The number of Jury Trials by Juries Summoned.	The amount paid to Jurors Summoned.	The number on Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Court Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
BRUCE	1	2	490	19490 76	28	1366 46	108	6602 10	6471 10	28	7		4	25 00	4	20 87	24 64
	2	3	219	7110 78	33	1257 49	57	3783 72	3998 44	14	.....	.....	.....	.....	.....	6 77	.....
	3	4	370	14843 48	26	1428 51	98	4958 96	4712 63	33	.....	.....	.....	.....	.....	14 88	.....
	4	5	278	7179 85	11	713 95	18	2260 93	2091 32	15	.....	.....	.....	.....	.....	7 98	.....
	5	6	162	5017 21	14	840 42	21	2823 13	2958 71	7	1	.....	.....	.....	1	4 63	.....
	6	7	102	3965 58	4	206 82	4	1172 90	1178 91	11	.....	.....	1	11 60	.....	4 78	.....
	7	8	84	3218 39	4	68 90	4	594 58	815 29	4	.....	.....	1	10 00	.....	3 36	.....
	8	9	211	6107 70	28	1406 83	42	3632 41	3632 41	6	.....	.....	.....	.....	.....	5 13	.....
	9		114	3622 51	1	12 00	12	2030 60	2010 47	8	.....	.....	.....	.....	.....	3 38	.....
CARLETON	1	2	1070	42411 66	3	1726 13	276	14030 44	13254 24	88	.....	3	7	32 00	.....	44 08	214 56
	2	3	51	1944 18	14	604 60	3	1025 69	1012 20	3	.....	1	7	.....	.....	5 27	.....
	3	4	44	1701 78	6	208 72	5	992 04	993 99	3	.....	1	.....	.....	.....	1 62	.....
	4	5	45	2411 00	3	59 00	3	1428 00	1433 00	6	1	.....	.....	.....	.....	2 46	.....
	5, 6	7	77	2281 94	6	186 21	4	724 47	643 47	1	.....	1	1	6 00	.....	2 01	.....
	7		38	1393 44	1	108 06	1	740 05	785 85	3	1	.....	1	9 00	.....	1 38	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.		The total amount of Suitors' money paid out of Court in each County, United Counties or District.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Court Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.				$	c.	$	c.						$	c.			$	c.		$	c.
Brought forward.....	11	903	33275	59	107	4212	81	14300	02	58	126	5	8	.....	.....	3	6	29	60	46	60	1	5	32	35	71	78	24	64
BRUCE.....	9	2030	70494	26	149	7391	38	27869	28	8	2	.....	.....	.....	.....	6	10	47	00	.....	.....	.....	.....	56	82	214	56		
CARLETON.....	7	1325	52143	40	33	2892	72	18132	75	104	2	.....	.....	6	.....	10	19	47	00	122	00	6	19	56	82	214	56	239	20
Carried forward.....	27	4258	155913	25	289	14496	91	60302	05	288	15	6	19																

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The Total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the Goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to "Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
DUFFERIN	1	440	12860 74	80	4004 23	61	4997 07	4950 07	35	.....	.....	1	9 00	.....	18 01	.....
	2	330	10082 20	31	1351 82	11	3876 03	3732 76	11	6	.....	4	39 00	.....	9 40	.....
	3	207	6273 60	24	923 50	11	2770 24	2805 08	8	.....	.....	1	12 00	.....	5 83	.....
	4	106	4889 18	30	1873 64	5	1113 63	985 31	14	.....	.....	.....	.....	.....	4 79	.....
ELGIN	1	314	10692 66	27	1372 11	30	5827 31	5827 31	15	3	1	2	21 00	2	10 75	.....
	2	134	5768 53	7	578 37	4	3166 09	3166 09	14	1	1	2	20 00	.....	8 13	.....
	3	714	20709 80	44	1845 45	83	9536 55	9536 55	20	3	1	.....	.....	1	18 80	40 43
	4	235	8466 06	44	2178 95	21	4279 68	4198 16	25	2	.....	3	30 00	1	12 70	.....
ESSEX	1	75	2222 03	4	224 26	31	760 87	923 78	2	1	.....	1	10 00	.....	2 17	.....
	2	237	7719 56	13	481 48	59	3408 64	3323 63	13	5	2	2	14 00	.....	8 63	.....
	3	148	7357 82	6	257 60	21	2981 46	3023 63	15	.....	.....	.....	.....	.....	7 87	.....
	4	140	5039 55	9	520 71	12	1514 80	1480 85	13	2	5	4	47 00	.....	6 78	.....
	5	286	11121 36	11	935 65	72	5029 92	4898 50	13	1	.....	2	20 00	.....	15 30	.....
	6	176	3236 45	5	364 02	9	2066 17	2066 17	6	.....	.....	.....	.....	.....	4 11	.....
	7	343	13539 61	12	387 31	102	5289 90	6080 63	24	2	2	.....	.....	.....	12 24	.....
	8	199	7324 53	4	93 39	41	2153 45	2219 23	13	1	3	.....	.....	.....	7 27	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.		The total amount of Suitors' money paid out of Court in each County, United Counties or District.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.			$	c.		$	c.			$	c.
Brought forward.....	27	4258	155013	25	289	14496	91	744	61457	77	60302	05	288	15	6	19	122	00	6	160	95	50	38	239	20
DUFFERIN	4	1083	34703	12	165	8153	19	88	12756	97	12473	22	68	6	.....	6	60	00	.....	38	03	.....		.....	
ELGIN	4	1397	45637	05	122	5904	88	138	22869	63	22728	11	74	9	3	7	71	00	4	50	38	63	77	.....	
ESSEX	8	1604	57540	91	64	3244	42	350	23187	21	18624	82	99	10	13	9	91	00	.....	.....		.....		.....	
Carried forward.....	43	4084	293796	33	640	31859	40	1320	120211	58	113528	20	529	40	22	42	344	00	10	313	13	114	15	279	63

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses. $ c.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts. $ c.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court. $ c.	The total amount of Suitors' money paid out of Court. $ c.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the Goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned. $ c.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to "Treasurer for "Division Court Jury Fund." $ c.	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province. $ c.	
FRONTENAC	1	1	456	19715 30	25	1325 31	68	6856 99	6754 61	43	10	.....	.....	2	18 00	.....	19 98	3 65
	2	2	32	236 19	3	151 33	7	380 76	386 58	3	1	.....	.....	.....	.....	.....	1 35	.....
	3	3	51	1497 90	8	332 26	7	1176 48	1141 63	3	.....	1	.....	.....	.....	.....	1 78	.....
	4	4	176	4331 89	13	433 56	62	1559 52	1476 10	4	.....	.....	.....	2	24 00	.....	4 37	.....
	5	5	85	2315 99	6	455 61	23	705 77	660 62	4	1	.....	.....	.....	.....	.....	2 05	.....
GREY	1	1	492	18131 72	30	1344 43	128	5273 97	5273 97	29	3	1	1	1	9 00	.....	16 56	21 77
	2	2	297	10143 38	21	1029 13	27	4262 20	4414 63	11	1	1	.....	.....	.....	1	8 92	.....
	3	3	363	14819 43	11	459 82	27	3921 46	3954 06	27	.....	.....	3	3	21 00	.....	15 39	.....
	4	4	178	6838 30	15	467 55	16	3303 89	3281 29	10	.....	1	.....	.....	.....	.....	6 61	.....
	5	5	335	10997 89	40	1776 60	30	4846 60	4760 09	11	2	.....	.....	.....	.....	.....	9 38	.....
	6	6	166	5032 57	18	820 70	57	2399 14	2213 77	7	1	.....	.....	.....	.....	.....	4 06	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or Districts.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or Districts.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward.....	43	4084	293796 33	640	31869 40	1320	120211 58	113528 20	529	40	22	42	344 00	10	313 13	279 63
FRONTENAC	5	800	28097 27	55	2698 67	167	10679 52	10419 54	57	12	1	4	42 00	.....	29 53	3 65
GREY	6	1831	65293 29	135	5889 23	285	24607 26	23891 81	95	8	2	4	30 00	1	60 92	21 77
Carried forward.....	54	6715	387186 89	830	40456 70	1772	154898 36	147839 55	681	60	25	50	416 00	11	403 58	305 05

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of Suits entered for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
HALDIMAND	1	147	4641 90	13	902 25	9	1130 09	1113 05	8	3	4				4 13	
	2	51	1234 83	9	389 26	12	901 32	901 32	5	1					2 59	
	3	112	4192 18	11	729 66	6	1748 69	1519 83	8	1				1	4 84	
	4	18	962 00				335 09	328 00	2						0 92	
	5	40	1641 23	8	353 81	2	648 42	640 56	3	1					1 62	
	6	143	4237 50	12	663 87	11	2562 50	2567 44	10			6	44 00		8 38	
HALIBURTON	1	77	2714 81	8	210 47	14	752 32	749 32	5	2	1	3	18 00	1	2 27	
	2	135	2150 00	3	167 82	6	1107 85	1115 23	3		1			1	1 95	
HALTON	1	159	7068 62	23	891 01	25	2652 78	2806 87	12						8 10	
	2	83	2508 88	12	98 81	4	1570 72	1551 68	6		1				3 18	
	3	207	6791 25	12	627 79	29	1741 10	1688 46	11						6 38	
	4	112	3423 12	6	177 80	14	1579 56	1546 33	5			2	23 60		3 94	
	5	20	1063 51	2	10 53	3	349 88	366 93	2						1 13	
	6	64	1119 97	18	917 29	3	323 19	323 19	4						3 04	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Districts.		The total amount of Suitors' money paid out of Court in each County, United Counties or Districts.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Juror, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or Districts.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.				$	c.			$	c.		$	c.
Brought forward.....	54	6715	387156	89	830	40446	70	1772	154808	36	147839	55	681	60	25	50	416	00	11	403	58	4	22	305	05
HALDIMAND.....	6	411	16909	64	53	3038	25	40	7326	11	7090	20	36	6	4	8	64	00	.....	22	48	.....		.....	
HALIBURTON	2	212	4864	81	11	378	20	20	1860	17	1864	55	8	2	1	.....	.....		2	4	22	.....		.....	
HALTON	6	645	22905	35	73	2653	23	78	8217	23	8283	36	40	.....	.....	5	41	00	.....	25	77	.....		.....	
Carried forward.....	68	7983	431936	69	967	46516	47	1910	172901	87	165077	66	765	68	30	63	521	00	13	456	05			305	05

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
HASTINGS	1	1	354	13161 75	27	31 92	51	3034 55	3127 42	36	2	.....	2	19 00	.....	15 66	.....
	2	2	40	1335 00	1	5 51	6	625 28	643 44	.....	1	.....	.....	.....	.....	0 93	.....
	3	3	73	2657 42	23	597 62	2	902 26	915 06	6	.....	.....	.....	.....	.....	2 76	.....
	4	4	48	1690 08	3	.....	.....	522 00	483 78	.....	.....	1	.....	.....	.....	1 11	.....
	5	5	130	5636 55	5	57 05	7	1050 18	987 61	14	1	.....	2	20 00	.....	7 17	.....
	6	6	158	4900 00	8	448 63	19	1896 70	1938 57	7	3	.....	1	12 00	.....	5 01	.....
	7	7	14	388 71	3	65 07	1	472 00	472 00	.....	.....	.....	.....	.....	.....	0 24	.....
	8	8	130	3712 19	4	107 01	15	1285 63	1278 88	5	1	.....	.....	.....	.....	3 14	.....
	9	9	147	4302 09	20	626 16	15	986 28	976 28	.....	.....	.....	.....	.....	.....	3 53	.....
	10	10	71	1860 45	2	47 77	1	506 52	447 23	4	.....	.....	.....	.....	.....	1 96	.....
	11	11	38	1062 98	1	.....	3	432 96	432 91	2	.....	.....	.....	.....	.....	1 22	.....
	12	12	52	2484 05	12	460 63	10	751 27	699 08	7	2	.....	.....	.....	.....	2 77	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or District.	The number of suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Juries called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or Districts.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward. ...	68	7983	431936 69	967	46516 47	1910	172301 87	165077 66	765	68	30	63	521 00	13	456 05	305 05
HASTINGS	12	1255	43191 27	109	2397 27	130	12525 03	12402 25	86	10	2	5	51 00	.....	45 50	.....
Carried forward.....	80	9238	475127 96	1076	48913 74	2040	184826 90	177479 91	851	78	32	68	572 00	13	501 55	305 05

RETURN of Division Court Business.—*Continued.*

	THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors summoned pursuance of section 122 of "The Division Courts Act."	Amount payable to "Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.			
	HURON—*Con.*	5	186	6539 08	19	578 95	28	4099 74	4192 99	9	3					5 76	
		6	96	2882 86	14	488 69	11	868 66	947 52	3						2 25	
		7	52	2313 39	3	83 27	4	446 56	446 56	6						2 40	
		8	206	7945 65	25	1022 10	32	2463 40	2463 40	10	1	1	1	11 00		7 14	
		9	121	4474 47	27	1424 33	15	1872 60	2027 76	15	1		3	23 00		6 93	
		10	80	2158 07	3	55 69	10	1073 65	1040 50	3						2 04	
	KENT	1	576	15651 74	51	2099 59	264	10124 50	9891 79	69	1					28 77	56 25
		2	403	15244 40	26	676 53	139	5839 35	5885 32	29	3					14 00	
		3	307	10383 52	21	1019 24	445	4793 63	4781 70	16						9 58	
		4	116	3665 71	10	537 98	17	1631 37	1023 70	6	2					3 84	
		5	240	6368 92	16	1003 43	53	2104 47	2000 64	16	1					6 71	
		6	193	6863 35	19	439 85	57	2536 94	2492 01	15	5	1	1	9 00		6 61	
		7	51	1044 25	6	271 85	3	978 53	964 33	1	2					76	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.		The total amount of Suitors' money paid out of Court in each County, United Counties or District.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.						$	c.		$	c.
Brought forward.....	80	9238	475127	96	1076	48913	74	2040	184326	90	177479	91	851	149	78	9	32	2	68	10	572	00	77	00	13	501	55	76	91	305	05
HURON	10	1911	71276	42	146	6479	18	315	31039	57	31478	07	149	9	32	2	10	1	9	00	77	00				70	27			56	26	
Carried forward.....	97	13035	605826	25	1362	61434	39	2914	244155	26	236548	30	1152	101	36	79	658	00	13	648	73	361	31
KENT	7	1886	59421	87	140	6041	47	559	27708	79	27590	32	152	14	2	1	9	00													

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitor's money paid into Court.	The total amount of Suitor's money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
LAMPTON	1	1	327	12382 96	22	787 03	30	4807 23	4880 20	32		1	2	20 00	2	13 68	.....
	2	2	185	6184 92	9	417 35	23	2761 74	2774 82	9	1	.....	.....	.....	.....	.....	.....
	3	3	172	7259 54	20	937 00	6	1039 01	1922 26	13	2	.....	1	8 00	.....	6 39	.....
	4	4	110	3068 98	19	860 91	2	1875 65	1812 54	5	.....	4	4	25 00	.....	5 29	.....
	5	5	103	3005 77	11	453 88	4	1558 65	1558 65	4	.....	1	.....	.....	1	3 22	.....
	6	6	114	3441 71	9	252 34	17	2087 25	2037 59	8	.....	.....	1	12 00	.....	4 39	.....
	7	7	171	5986 35	17	608 76	9	2358 85	2244 29	11	.....	.....	.....	.....	.....	5 96	.....
	8	8	277	9874 19	48	1977 57	35	6085 24	5492 27	16	3	.....	2	22 00	.....	9 86	.....
	9	9	126	4799 10	12	513 58	10	2866 74	2746 23	5	.....	1	3	33 00	.....	6 00	.....
LANARK	1	1	185	6184 92	9	417 35	23	2761 74	2774 82	9	1	.....	.....	.....	.....	.....	.....
	2	2	81	2094 16	1	96 35	17	971 63	941 98	3	.....	.....	.....	.....	.....	5 58	.....
	3	3	75	2802 66	1	114 82	5	430 56	366 25	7	.....	.....	.....	.....	.....	1 80	.....
	4	4	195	6677 04	5	178 00	31	2457 86	2433 86	8	.....	.....	.....	.....	.....	1 75	.....
	5	5	49	1526 96	4	138 71	1	651 11	618 66	1	.....	.....	.....	.....	.....	4 85	.....
	6	6	103	3988 28	.....	.....	25	846 75	846 75	11	2	.....	1	.....	.....	1 27	.....
																5 33	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Districts.	The total amount paid out of Court in each County, United Counties or Districts.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or Districts.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward	97	13035	605826 25	1362	61434 39	2014	244155 26	236648 30	1152	101	36	79	658 00	13	648 73	361 31
LAMBTON :	9	1400	51014 60	158	6301 07	112	23478 64	22694 03	94	5	7	13	120 00	3	55 89	.....
LANARK	6	688	23274 02	20	945 23	102	8119 65	7982 32	39	3	.....	1	.....	.....	20 87	.....
Carried forward	112	14423	680114 87	1530	68770 69	3128	275753 55	267324 65	1285	109	43	93	778 00	16	725 49	361 31

RETURN of Division Court Business.—*Continued.*

	THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
1	LEEDS AND GRENVILLE....	1	592	20216 41	14	604 26	68	6302 39	6392 12	43	1	.....	1	9 00	7	20 04	6 42
2		2	182	4417 18	.....	.....	18	1974 83	2020 86	9	2	1	.....	.....	2	4 41	.....
3		3	138	4967 38	.....	523 03	12	1646 26	1537 82	8	.....	.....	.....	.....	3	4 71	.....
4		4	146	5709 00	9	531 25	12	423 60	523 00	11	.....	.....	.....	.....	.....	5 72	.....
5		5	119	4771 82	14	182 55	21	2109 06	2036 83	13	.....	.....	.....	.....	1	5 26	.....
6		6	145	5563 83	7	223 33	10	1228 90	1156 76	16	2	.....	.....	.....	2	4 60	.....
7		7	57	2469 70	4	147 63	10	1128 90	1178 87	5	.....	.....	.....	.....	1	2 36	.....
8		8	97	4635 60	2	21 30	3	1147 68	1166 58	11	1	.....	.....	.....	2	2 73	.....
9		9	63	2184 65	7	185 30	13	2016 38	1963 45	9	1	.....	.....	.....	2	3 60	.....
10		10	70	1968 12	1	90 75	11	765 86	764 64	1	1	.....	.....	.....	10	0 94	.....
11		11	49	948 63	.....	.....	1	219 10	216 10	1	.....	.....	.....	.....	.....	0 76	.....
12		12	48	1475 91	.....	.....	6	323 70	315 61	2	1	.....	.....	.....	.....	1 25	.....
1	LENNOX AND ADDINGTON...	1	388	11683 94	22	886 09	42	4441 41	4490 95	18	5	.....	.....	.....	.....	.....	.....
2		2	173	3766 99	4	193 08	25	1589 22	1589 22	14	2	.....	.....	.....	.....	10 20	.....
3		3	15	509 08	3	83 41	...	256 11	256 11	...	.....	.....	.....	.....	.....	5 09	.....
4		4	191	6655 11	5	75 75	53	3045 30	3907 99	13	.....	.....	2	21 00	.....	6 33	.....
5		5	70	2554 07	3	151 37	3	518 10	333 76	10	.....	.....	.....	.....	.....	7 13	.....
6		6	44	1289 65	1	11 44	3	436 59	422 45	3	.....	.....	.....	.....	.....	3 52	.....
7		7	176	4464 85	4	108 90	10	2102 38	1715 80	6	1	.....	2	18 00	.....	1 32	.....
																4 99	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or District.	The number of suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Juries called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward....	112	14423	680114 87	1530	68770 69	3128	275753 55	207224 65	1285	109	43	93	778 00	16	725 49	361 31
LEEDS AND GRENVILLE....	12	1705	58620 36	66	2518 71	185	19450 13	19348 64	123	9	1	1	9 00	28	58 46	6 42
LENNOX AND ADDINGTON..	7	957	31313 50	42	1478 04	137	12392 11	12015 60	64	8	.....	4	39 00	.....	32 58	.....
Carried forward.....	131	16785	770048 73	1638	72767 44	3450	307595 79	288588 89	1472	126	44	98	826 00	44	816 53	367 73

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Division.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The Total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the Goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
LINCOLN	1	113	3472 91	15	814 94	13	2160 35	2189 40	7	2	1	....	....	....	....	....
	2	439	19841 33	48	2298 40	98	2713 99	2512 37	44	3	....	2	14 00	....	....	....
	3	178	4522 60	13	581 06	22	3108 63	3051 04	7	6	....	....	....	....	....	....
	4	84	3025 68	6	360 37	10	1352 88	1465 62	3	....	1	....	....	....	....	....
MIDDLESEX	1	1178	41219 55	55	2643 06	166	13112 69	7737 27	58	11	1	2	20 00	....	35 27	77 04
	2	285	10557 97	13	518 60	23	3433 47	3576 04	26	3	....	3	32 00	3	12 53	....
	3	122	4119 33	20	957 40	14	1808 50	1690 66	6	1	....	2	21 00	....	5 17	....
	4	112	3295 96	11	418 49	4	1164 19	1146 69	3	4	....	1	11 00	....	3 22	....
	5	267	8676 19	30	1203 28	18	4876 82	5044 29	19	1	....	2	15 00	....	10 04	....
	6	187	6746 58	18	761 15	11	2961 77	2755 17	12	3	....	....	....	....	10 36	....
	7	99	3815 59	11	169 19	5	1489 90	1366 96	7	....	....	....	....	....	2 05	....
	8	138	4046 66	22	1170 81	4	1887 00	1849 92	10	1	....	2	24 00	....	5 12	....
	9	104	3405 98	4	89 24	30	1260 66	1154 91	3	....	....	....	....	....	1 76	....
MUSKOKA	1	161	6539 43	16	118 87	9	1715 96	1720 87	13	4	....	....	....	....	....	....
	2	92	3653 36	29	1647 56	12	1141 09	1146 33	6	2	....	....	....	....	....	....
	3	99	2682 78	13	463 02	5	1097 61	1059 37	4	....	....	....	....	....	....	....
	4	17	684 16	1	19 99	2	77 75	30 75	1	1	....	....	....	....	....	....
NIPISSING	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	2	33	1173 11	....	....	....	89 24	80 24	....	....	....	....	....	....	....	....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.		The total amount of Suitors' money paid out of Court in each County, United Counties or District.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions to Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.					$	c.			$	c.	
Brought forward....	131	16785	770048	73	1638	72767	44	3450	307595	79	298588	89	1472	126	98	826	00	44	816	53	367	73
LINCOLN	4	814	30861	92	82	4054	77	143	9335	85	9218	43	61	11	2	14	00	.....	31	46	.....	
MIDDLESEX	9	2492	76873	81	184	7821	25	270	31635	00	26121	91	144	24	12	123	00	3	82	46	77	04
MUSKOKA	4	369	13459	63	59	2250	04	28	4032	41	3848	52	24	7	.....	.....		.....	.....		.....	
NIPISSING..... ...	2	33	1173	11	.....	.....		....	80	24	80	24	.....	.....	.....	.....		.....	.....		.....	
Carried forward....	150	20493	892417	20	1963	86693	50	4891	352679	29	337857	99	1701	168	112	963	00	47	930	45	444	77

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.			
NORFOLK	1	435	14118 00	11	695 56	115	5015 51	4715 31	25	2	.....	1	8 00	.....	12 21	.....
	2	247	6909 58	9	419 74	37	3739 79	3731 61	11	1	.....	.....	.....	2	6 87	.....
	3	148	4182 25	8	311 53	34	1782 62	1777 75	8	.....	.....	.....	.....	.....	3 92	.....
	4	149	4170 66	9	431 33	10	1864 38	1829 70	5	.....	.....	1	11 00	1	4 21	.....
	5	120	4025 46	10	677 44	5	2481 75	2432 12	7	2	.....	1	12 00	3	4 33	.....
	6	130	3820 60	9	246 00	8	3106 50	2519 12	10	2	1	.....	.....	.....	6 33	.....
	7	30	750 00	6	150 09	2	280 33	220 68	2	.....	.....	.....	.....	.....	1 34	.....
	8	86	2181 59	7	320 04	1	1217 14	1217 14	2	.....	3	2	11 00	.....	2 32	.....
NORTHUMBERLAND AND DURHAM	1	227	10683 39	14	722 98	31	3724 65	3783 69	21	2	.....	4	35 00	1	11 19	.....
	2	131	5112 79	16	767 36	8	1725 88	1481 86	8	3	.....	.....	.....	.....	4 85	.....
	3	378	11718 00	16	872 00	66	5692 52	5510 56	24	.....	.....	.....	.....	.....	13 27	.....
	4	270	11037 72	13	741 06	21	2363 91	2361 08	18	.....	1	1	11 00	.....	10 52	.....
	5	199	7836 00	12	558 21	27	3155 67	3104 15	17	.....	.....	.....	.....	.....	9 20	.....
	6	43	1689 49	12	728 78	1	1459 76	1459 76	1	.....	.....	.....	.....	.....	1 35	.....
	7	183	6947 54	13	496 19	20	2496 35	2423 24	13	2	.....	.....	.....	.....	6 67	.....
	8	153	6126 62	25	721 44	15	2694 49	2587 39	9	4	.....	1	13 00	1	5 60	.....
	9	154	5621 86	9	219 64	15	2034 56	2127 27	11	.....	.....	.....	.....	.....	5 30	.....
	10	86	2915 48	20	514 16	14	1253 45	1224 32	3	.....	.....	.....	.....	.....	2 93	.....
	11	157	5553 35	14	686 35	15	1374 22	1326 19	9	1	.....	.....	.....	.....	5 33	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Districts.		The total amount of Suitors' money paid out of Court in each County, United Counties or Districts.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of "Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Acts," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.		
			$	c.		$	c.		$	c.		$	c.						$	c.		$	c.		$	c.
Brought forward.....	150	20493	892417	20	1963	86893	50	5336	352079	29	337857	99	1701	168	57	112	903	00	47	930	45	444	77			
NORFOLK.....	8	1405	27157	54	59	3061	64	212	19548	42	18443	43	70	7	4	5	42	00	6	38	56	.....				
NORTHUMBERLAND AND DURHAM.....	11	1981	73342	24	164	7028	17	233	27885	46	27329	51	1349	15	2	6	59	00	2	75	96	...				
Carried forward.....	169	23879	992816	98	2186	96983	31	5781	400113	17	383630	93	1905	190	63	123	1004	00	55	1044	97	444	77			

RETURN of Division Court Business.—*Continued*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Fort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
ONTARIO	1	332	15683 90	49	3558 40	35	5799 80	5799 80	38	4	2	.....	.....	.....	16 22	.....
	2	112	4650 40	10	640 00	15	2400 00	2400 00	15	.....	4	1	6 00	.....	6 63	.....
	3	214	9052 00	19	941 99	49	2398 24	2304 05	15	5	1	4	29 00	1	8 82	.....
	4	338	11419 25	24	881 95	69	3624 57	3596 15	25	1	.....	2	24 00	.....	13 80	.....
	5	119	7492 14	27	979 79	19	5113 11	5101 17	9	3	2	.....	.....	1	6 16	.....
	6	152	6970 62	20	917 78	18	2349 02	2293 10	18	1	1	.....	.....	.....	7 50	.....
	7	46	1915 76	11	488 67	9	618 27	673 42	1	2	1	.....	.....	.....	1 51	.....
OXFORD	1	527	17075 77	26	846 32	107	8291 39	8353 62	29	3	1	18	76 00	.....	24 59	14 19
	2	143	3539 50	11	747 98	10	1033 50	1026 59	4	2	3	1	7 00	.....	3 48	.....
	3	127	6072 18	17	417 63	11	2424 98	2485 87	18	.....	.....	1	11 00	.....	7 52	.....
	4	317	11808 12	33	1165 37	44	5066 77	5022 97	19	1	.....	2	19 00	1	12 59	.....
	5	360	11895 82	29	1108 14	25	4328 39	4045 84	18	.....	.....	4	17 00	.....	12 76	.....
	6	206	7453 06	19	924 82	3	3517 94	3449 50	15	4	1	8	44 00	2	11 92	.....
PARRY SOUND	1	66	2980 48	17	796 70	1	1106 94	910 32	4	2	.....	1	.....	.....	.....	.....
	2	37	879 59	4	277 87	.....	280 18	280 18	.....	1	.....	1	.....	.....	.....	.....
	3	15	485 49	4	253 17	1	119 92	156 51	1	3	.....	3	34 00	.....	.....	.....
	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	6	13	507 27	2	96 60	1	119 01	151 32	.....	.....	.....	.....	.....	1	.....	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or District.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or Districts.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.	
Brought forward.....	169	23879	992816 98	2186	96983 31	5536	400113 17	383630 93	1905	190	63	125	1064 00	55	1044 97	444 77	
ONTARIO	7	1313	56834 07	160	8408 58	214	22303 01	22167 70	121	16	11	7	59 00	1	60 04	.....	
OXFORD.....	6	1730	57844 25	135	5210 26	200	24662 97	24384 39	103	10	5	34	174 00	3	72 86	14 19	
PARRY SOUND	6	131	4942 83	27	1424 34	3	1626 05	1498 33	5	6	.....	5	34 00	1	.....	.....	
Carried forward.....	188	27053	1112488 13	2508	112026 49	5753	448705 20	431680 65	2134	222	79	169	1331 00	60	1177 87	458 96	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.		The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.		The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.		The total amount of Suitors' money paid out of Court.		The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the Goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.		The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Court Jury Fund."		Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.	
			$	c.		$	c.		$	c.	$	c.					$	c.		$	c.		$	c.
PEEL	1	593	22145	67	20	1160	17	26	6036	83	4419	76	48	.....	.....	.....	12	00	.....	26	96	.....	.....	.....
	2	121	3953	21	10	588	97	8	1764	12	1687	43	2	2	.....	2	24	00	.....	4	45	.....	.....	.....
	3	115	4009	28	18	785	24	9	1390	57	1306	70	6	2	.....	.....	10	00	1	4	40	.....	.....	.....
	4	85	2831	35	1	9	37	17	1272	72	1272	72	2	.....	.....	.....	.....	.....	.....	2	06	.....	.....	.....
PERTH	1	533	21074	42	26	1249	53	69	9166	02	9161	33	64	1	.....	.....	.....	.....	.....	22	38	.....	.....	.....
	2	218	9868	37	20	1063	40	32	4619	95	4760	71	28	1	.....	.....	11	00	.....	25	12	.....	.....	.....
	3	330	10301	45	7	281	70	68	4060	05	4130	40	22	.....	.....	1	31	00	.....	11	31	.....	.....	.....
	4	51	1845	68	8	670	42	3	1391	29	1369	02	3	.....	.....	.....	24	00	1	11	65	.....	.....	.....
	5	72	3034	75	10	419	24	4	1343	59	1337	39	7	.....	.....	.....	12	00	.....	2	92	.....	.....	.....
	6	276	9628	78	29	1384	32	39	3240	95	3272	16	18	.....	.....	.....	.....	.....	.....	3	81	.....	.....	.....
PETERBORO'	1	489	18108	73	16	758	18	11	5305	96	5287	45	26	.....	1	.....	.....	.....	.....	10	59	.....	.....	.....
	2	117	3542	56	16	813	59	1	1423	48	1423	48	3	2	.....	1	11	00	.....	15	41	.....	.....	.....
	3	24	1079	83	.....	.....	.....	.....	397	08	372	48	3	1	.....	.....	.....	.....	.....	3	12	.....	.....	.....
	4	100	3048	47	2	120	62	1	1660	19	1660	19	7	.....	.....	.....	.....	.....	.....	1	23	.....	.....	.....
	5	25	756	83	8	553	91	.....	320	48	320	48	1	.....	.....	.....	.....	.....	.....	3	10	.....	.....	.....
																				0	61			

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or District.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or Districts.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.	$ c.
Brought forward.....	188	27053	1112488 13	2508	112025 49	5753	448706 20	431680 65	2134	222	79	169	1331 00	60	1177 87	458 96	
PEEL.....	4	914	32939 51	49	2543 75	60	10504 24	9683 61	58	4	2	4	46 00	.....	37 87	.....	
PERTH.....	6	1480	55753 45	100	5063 61	215	23821 85	24031 01	142	4	2	7	78 00	1	65 40	22 38	
PETERBORO'.....	5	755	9536 42	42	2246 30	13	9106 49	9064 08	40	3	1	1	11 00	.....	23 47	.....	
Carried forward.....	203	30202	1210717 51	2699	121883 15	6041	492137 78	474462 35	2374	233	84	181	1466 00	61	1304 61	481 34	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Division.	The number of Suits entered in Court exclusive of Transcripts of Judgment and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses. $ c.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts. $ c.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court. $ c.	The total amount of Suitors' money paid out of Court. $ c.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of Actions of Replevin where the value of the (goods or other property or effects distrained, taken or detained exceeds the sum of $40.	The number of Jury Trials by Juries Summoned.	The amount paid to Jurors Summoned. $ c.	The number of Jury Trials by Juries called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Court Jury Fund." $ c.	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province. $ c.
PRESCOTT AND RUSSELL.....	1	31	895 31	1	50 32	1	77 41	60 19	1	1	1			1	0 73		
	2	40	2105 18	.....	.....	1	889 16	889 16	6	.....	.....	.....	.....	.....	2 37		
	3	28	800 43	.....	.....	.....	245 49	245 49	.....	.....	1	.....	.....	.....	0 54		
	4	124	3447 16	1	86 75	4	602 24	571 52	6	4	.....	.....	.....	.....	3 33		
	5	84	2787 82	12	208 74	...	762 73	706 74	4	.....	.....	.....	.....	.....	2 50		
	6	76	3015 76	17	772 52	4	1321 97	1230 78	8	1	.....	.....	.....	.....	3 29		
	7	25	781 98	.....	.....	.....	184 17	333 96	1	.....	.....	.....	.....	.....	0 76		
	8	26	668 51	.....	.....	.....	206 98	222 35	.....	.....	.....	.....	.....	.....	0 45		
PRINCE EDWARD.....	1	625	13478 93	11	511 75	11	7057 03	7005 55	25	1	.....	.....	.....	.....	.....	12 67	3 90
	2	109	3000 61	3	53 34	5	1240 20	1240 20	5	.....	.....	.....	.....	.....	.....	2 87	.....
	3	22	632 00	4	190 33	...	213 24	214 95	1	.....	.....	.....	.....	.....	.....	0 58	.....
	4	50	1120 26	10	748 08	2	453 69	453 69	1	.....	.....	.....	.....	.....	.....	0 88	.....
	5	38	1869 75	6	166 86	.....	721 18	721 18	3	.....	.....	.....	.....	.....	.....	1 68	.....
	6	24	855 02	.....	.....	.....	736 56	732 36	1	.....	.....	.....	.....	.....	.....	0 76	.....
	7	54	2280 97	3	82 95	.....	206 84	206 84	4	1	.....	.....	.....	.....	.....	2 11	.....
	8	28	1191 00	.....	.....	.....	577 08	518 20	4	.....	.....	.....	.....	.....	.....	1 54	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Distrtict.		The total amount of Suitors' money paid out of Court in each County, United Counties or Distrtict..		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Court Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.							$	c.		$	c.	
Brought forward.....	203	30202	1210717	51	2699	121885	15	6041	492137	78	474462	35	2374	233	84	181	1466	00	61	1304	61	481	34	
PRESCOTT AND RUSSELL....	8	434	14562	15	31	1208	33	10	4290	15	4260	19	26	2	1	.....	.....		1	13	97	....		
PRINCE EDWARD	8	931	24428	54	37	1250	11	18	11420	66	11092	97	44	2	....	.....	.....		.....	23	09	3	90	
Carried forward.....	219	31567	1249708	20	2767	124343	59	6069	507848	49	489815	51	2444	237	85	181	1466	00	62	1341	67	485	24	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgment and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.		The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.		The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.		The total amount of Suitors' money paid out of Court.		The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of Actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Juries Summoned.	The amount paid to Jurors Summoned.		The number of Jury Trials by Juries called in pursuance of Section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Court Jury Fund."		Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.	
				$	c.		$	c.		$	c.	$	c.					$	c.		$	c.		$	c.
RENFREW	1	1	270	9073	15	7	508	55	54	2961	73	2956	74	11	1	1	.....	.....	.....	.....	.....	8	15	.....
	2	2	32	1516	63	.....	.....	.....	16	339	88	309	08	4	.....	.....	.....	.....	.....	.....	.....	1	93	.....
	3	3	135	4413	23	1	65	40	20	1907	99	1895	24	6	.....	.....	.....	.....	.....	.....	.....	4	68	.....
	4	4	102	4058	70	14	757	85	5	1489	21	1469	58	7	2	.....	3	17	00	.....	.....	5	17	.....
	5	5	61	2200	05	2	47	08	10	938	49	917	19	3	.....	.....	.....	.....	.....	.....	.....	1	98	.....
	6	6	76	2737	63	2	250	06	3	1234	52	1228	79	3	1	.....	.....	.....	.....	.....	.....	2	34	.....
	7	7	36	1116	50	2	82	45	4	209	01	227	01	1	.....	.....	.....	.....	.....	.....	.....	1	15	.....
	8	8	120	3986	08	3	439	67	15	751	56	751	56	5	.....	.....	.....	.....	.....	.....	.....	2	61	.....
SIMCOE	1	1	491	10665	07	32	1472	98	127	5694	98	5564	41	42	2	1	.....	.....	.....	.....	.....	19	62	.....
	2	2	137	5155	31	10	148	84	21	3176	82	3171	58	7	1	1	.....	.....	.....	.....	.....	4	66	.....
	3	3	247	9197	58	32	1429	50	35	3233	63	3157	26	21	.....	1	1	20	00	.....	.....	16	00	.....
	4	4	350	14121	18	27	1821	69	57	3128	24	2979	56	23	.....	1	.....	.....	.....	.....	.....	11	56	.....
	5	5	87	3029	94	12	603	88	6	1795	35	1661	98	5	.....	.....	.....	.....	.....	.....	.....	2	87	.....
	6	6	329	11534	49	40	2217	46	71	5517	04	5330	35	12	2	.....	1	3	00	.....	.....	16	36	.....
	7	7	153	5028	33	16	666	87	27	2046	06	1831	58	7	.....	.....	1	12	00	.....	.....	6	93	.....
	8	8	280	13813	31	42	2282	18	39	5699	93	5084	33	16	1	.....	.....	.....	.....	.....	.....	13	53	.....
	9	9	223	4533	36	48	1923	33	22	3763	67	3763	67	25	7	2	.....	.....	.....	.....	.....	11	53	.....
	10	10	53	2118	69	4	161	70	6	1087	80	1087	89	6	.....	.....	.....	.....	.....	.....	.....	2	49	.....

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts, in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments, from other Courts, in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitor's money paid into Court in each County, United Counties or Distriet.	The total amount of Suitors' money paid out of Court, in each County, United Counties or Distriet.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or Distriet.	The number of actions for Tort where the amount claimed exceeds $40, in each County, United Counties or Distriet.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40 in each County, United Counties or Distriet.	The number of Jury Trials by Juries summoned in each County, United Counties or Distriet.	The amount paid to Jurors summoned in each County, United Counties or Distriet.	The number of Jury Trials by Jurors, called in pursuance of Section 122 of "The Division Courts Act," in each County, United Counties or Distriet.	The amount payable to Treasurer for "Division Court Jury Fund" in each County, United Counties or Distriet.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or Distriet.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward....	219	31567	1249708 20	2767	124343 59	6069	507348 49	489815 51	2444	237	85	181	1466 00	62	1341 67	485 24
RENFREW.....	8	832	29101 97	31	1451 06	127	9832 39	9695 19	40	5	3	3	17 00	.....	27 41	.....
SIMCOE.....	10	2350	79197 26	263	12816 43	411	34523 61	33571 91	165	14	7	3	41 00	.....	89 42	.....
Carried forward	237	34749	1358007 43	3061	138611 08	6607	552204 49	533092 61	2649	256	95	187	1524 00	62	1458 50	485 24

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitor's money paid into Court.	The total amount of Suitor's money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors summoned in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
STORMONT, DUNDAS AND GLENGARRY	1	1	132	3839 50	1	14 55	1	1949 02	2184 60	6	.....	.....	.....	24 00	.....	3 27	.....
	2	2	87	3029 66	5	162 02	....	495 96	449 29	4	1	.....	.....	.....	.....	2 41	.....
	3	3	No return.														
	4	4	179	4761 32	7	205 73	20	1490 16	1359 08	3	.....	.....	2	18 00	.....	2 70	.....
	5	5	136	5586 48	2	103 44	19	808 73	750 08	12	4	.....	.....	.....	.....	6 16	.....
	6	6	75	2411 95	4	360 11	....	1100 58	1166 58	5	1	.....	.....	.....	.....	2 75	.....
	7	7	90	3570 13	5	202 09	5	929 09	911 78	11	3	.....	2	10 00	.....	5 69	.....
	8	8	86	2642 88	4	174 41	4	941 20	962 24	4	1	.....	.....	.....	.....	2 29	.....
	9	9	101	3761 55	3	99 58	9	1082 63	1016 76	11	.....	.....	.....	.....	.....	4 50	.....
	10	10	64	1539 26	6	182 30	2	862 00	802 00	1	.....	.....	.....	.....	.....	1 39	.....
	11	11	32	1014 27	1	21 14	5	264 13	352 70	1	.....	.....	.....	.....	.....	0 25	.....
	12	12	81	2174 81	3	104 41	3	972 06	972 06	3	.....	1	.....	.....	.....	1 86	.....
THUNDER BAY	1	1	53	2413 36	7	334 87	1	587 08	558 43	.....	1	1	.....	.....	.....	.....	.....
	2	2	No return.														
	3	3	11	654 69	.....	.....	....	23 00	23 00	.....	1	...	.....	.....	.....	.....	.....
	4	4	No return.														

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of suits entered, exclusive of Transcripts of Judgment and Judgment summonses, in each County, United Counties or District.	The amount of claims entered, exclusive of Transcripts of Judgment and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received by other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Distrlct.	The total amount of Suitors' money paid out of Court in each County, United Counties or Distrlct.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or Distrlct.	The number of actions for Tort where the amount claimed exceeds $10 in each County, United Counties or Distrlct.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10 in each County, United Counties or Distrlct.	The number of Jury Trials by Juries summoned in each County, United Counties or Distrlct.	The amount paid to Jurors summoned in each County, United Counties or Distrlct.	The number of Jury Trials by Juries, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or Distrlct.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or Distrlct.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or Distrlct.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward.....	237	34749	1358007 43	3061	138611 08	6607	552204 49	533092 61	2649	256	95	187	1524 00	62	1458 50	485 24
STORMONT, DUNDAS AND GLENGARRY	12	1063	34131 81	41	1689 78	68	10895 53	10921 17	61	10	2	4	52 00	.....	33 27	.....
THUNDER BAY..	4	64	3068 05	7	334 87	1	610 08	581 43	2	1	.....	.....	.....	.....	.....	.....
Carried forward.....	253	35876	1395207 29	3109	140635 73	6676	563710 10	544595 21	2710	268	98	191	1576 00	62	1491 77	485 24

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.		The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.		The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.		The total amount of Suitors' money paid out of Court.		The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.		The number of Jury Trials by Jurors called in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."		Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.	
				$	c.		$	c.		$	c.	$	c.						$	c.		$	c.		$	c.
VICTORIA	1	1	212	9559	83	37	1732	31	39	1275	66	1118	06	21	2	1		11	00				9	39	
	2	1	135	4882	58	11	552	50	4	1500	43	1483	43	5	1								3	71	
	3																								
	4	1	131	4567	34	9	653	13	5	2350	17	2388	14	8											
	5	1	266	1204	47	16	763	60	19	3942	96	5661	94	28	4								4	31	
	6	1	101	4446	51	15	1025	69	9	2218	38	2165	24	10	1								2	46	
	7	1	180	5529	40	12	491	66	16	1921	28	1684	41	8	3	1							4	36	
																							4	70	
WATERLOO	1	1	557	11208	45	19	1037	53	16	4669	14	4625	14	25									10	99	
	2	1	71	2515	81	13	581	67	8	1213	25	1202	27	5									2	39	
	3	1	228	5955	49	12	820	22	3	3447	87	3425	20	10			2						5	39	
	4	1	40	2014	23		239	66	4	916	72	900	72	5									3	09	
	5	1	89	3073	57	9	253	36	8	1545	82	1775	11	7									3	64	
	6	1	62	2856	70	6	444	18	5	1428	62	1475	62	11									3	77	
	7	1	68	3626	69	6	353	36	2	1195	39	1195	39	10									3	88	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or Districts.		The total amount of Suitors' money paid out of Court in each County, United Counties or Districts.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or Districts.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.		The amount of Fees and Emolluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.									$	c.		$	c.
Brought forward.....	253	35876	1365207	29	3109	140635	73	6075	563710	10	544595	21	2710	80	268	11	98	3	191	1	1576	00	62	1491	77
VICTORIA	7	1025	29990	13	100	5218	89	92	13188	98	12501	22	.....		.....		.....		.....		11	00	2	38	93
WATERLOO	7	915	31310	94	67	3729	98	46	14416	78	14599	45	73		.....		2		2		24	00	.....	33	05
Carried forward.....	267	37816	1426508	36	3276	149584	60	6814	591315	86	571695	88	2863		279		103		194		1611	00	64	1563	75

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.		
	$	c.	
Brought forward.....	485	24	
VICTORIA	.....		
WATERLOO	.....		
Carried forward.....	485	24	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $10.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors summoned pursuance of section 122 of "The Division Courts Act."	Amount payable to "Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
WELLAND.....	1	1	259	9309 25	22	1046 89	78	4549 76	4470 90	20	3		1	9 00		20 31	2 34
	2	2	23	1210 15	4	452 93	3	326 00	326 00	4	3		1	5 00	1	2 19	85
	3	3	108	3507 53	3	111 51	7	2345 07	2342 95	5	2	1		24 01	1	3 02	2 35
	4	4	218	6045 99	7	128 30	25	1976 99	1863 44	11	2	2	2	7 00	1	8 10	9 40
	5	5	171	7578 01	12	462 58	27	1910 00	1910 00	20	2	1				9 77	6 14
	6	6	292	9089 87	8	638 92	3	2379 63	2273 33	14	3		1	7 00		9 69	3 99
		7	970	35731 55	56	2740 23	143	13487 45	13216 62	74	15	4	4	52 00	2	41 77	25 73
WELLINGTON.....	1	1	486	18313 96	41	2124 07	46	7663 71	7659 59	52	3		1	9 00		20 31	2 34
	2	2	29	845 58	2	100 66	5	121 47	121 47	4						85	
	3	3	75	2854 38	5	165 99	35	732 67	774 49	4		2				2 35	
	4	4	263	9483 55	18	1105 86	33	2599 12	2637 12	17	1					9 40	
	5	5	196	3977 70	20	611 36	33	1856 74	1830 58	8						6 14	
	6	6	167	3716 15	8	414 91	3	686 65	646 51	6						3 99	
	7	7	70	2227 72	8	409 04	7	1193 91	1165 22	8						3 02	
	8	8	222	9280 08	32	2038 33	11	4916 84	4624 31	14	1		2	22 00		9 21	
	9	9	139	3425 65	7	167 04	6	1073 01	1081 44	13						6 01	
	10	10	211	8854 14	35	1637 51	15	3206 63	3379 54	18						8 97	
	11	11	265	10344 96	15	833 91	20	3290 91	3560 77	19	1		1	31 00		10 26	

RETURN of Division Court Business.—*Continued.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.	The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.	The number of Judgment Summonses issued in each County, United Counties or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.	The total amount of Suitors' money paid out of Court in each County, United Counties or District.	The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $40 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained exceeds the sum of $40 in each County, United Counties or District.	The number of Jury Trials by Juries summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.	The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Courts Jury Fund" in each County, United Counties or District.	The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.
			$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
Brought forward	267	37816	1426508 36	3276	149584 60	6814	501315 86	571695 88	2863	279	103	194	1611 00	64	1563 75	485 24
Welland	6	1071	36800 80	56	2841 13	143	13487 45	13486 62	74	15	4	5	45 00	2	40 17	.....
Wellington	12	2053	73323 87	191	9908 68	162	27341 06	28481 02	159	7	3	4	62 00	.....	80 51	2 34
Carried forward.....	285	40940	1536632 03	3523	161034 41	7129	632144 37	613363 52	3096	301	110	203	1718 00	66	1584 43	487 58

RETURN of Division Court Business.—*Concluded.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.		The number of Divisions.	The number of Suits entered in Court exclusive of Transcripts of Judgments and Judgment Summonses.	The amount of Claims entered in Court exclusive of Transcripts of Judgments and Judgment summonses.	The number of Transcripts of Judgments received from other Courts.	The amount of Claims received by Transcripts of Judgments from other Courts.	The number of Judgment Summonses issued.	The total amount of Suitors' money paid into Court.	The total amount of Suitors' money paid out of Court.	The number of Suits entered where the amount claimed exceeds $100.	The number of actions for Tort where the amount claimed exceeds $40.	The number of actions in Division where the value of the Goods or other property or effects distrained, taken or detained, exceeds the sum of $40.	The number of Jury Trials by Jurors summoned.	The amount paid to Jurors summoned.	The number of Jury Trials by Jurors summoned, in pursuance of section 122 of "The Division Courts Act."	Amount payable to Treasurer for "Division Courts Jury Fund."	Amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province.
				$ c.		$ c.		$ c.	$ c.					$ c.		$ c.	$ c.
WENTWORTH	1	1045	38471 66	100152 94	72	4132 32	466	22614 05	29677 74	240	2	....	3	9 00	....	102 63	1047 30
	2	219	5430 82	7290 30	21	889 72	35	4258 16	4015 62	12	....	2	3	36 00	....	8 04	....
	3	23	818 96	4977 99	6	288 57	20	2695 49	2803 67	10	....	....	1	10 00	....	5 25	....
	4	130	3934 41	10133 03	21	1440 43	77	5447 91	5445 69	21	....	1	....	....	....	9 99	....
	5	38	946 82	1296 55	10	551 83	1	1907 80	1946 62	7	2	....	....	....	....	4 24	....
	6	75	1988 15	5196 53	12	308 47	19	2235 72	2231 72	12	....	....	....	....	....	6 18	....
	7	56	1627 59	14375 49	16	171 90	16	4628 17	4202 80	40	....	....	....	9 00	....	16 48	....
	8	96	911 41	1309 40	3	80 10	10	2374 00	2349 00	2	....	....	....	....	....	4 79	....
	9	654	22879 76	2048 20	4	217 77	22	1035 28	988 28	5	....	....	....	....	....	2 81	....
	10	1967		75679 17	53	3079 76	520	18519 55	18839 70	164	....	1	9	27 00	....	80 66	1283 65
YORK	1	9086															
	2	208															
	3	142															
	4	229															
	5	120															
	6	153															
	7	255															
	8	158															
	9	69															
	10	1967															

RETURN of Division Court Business.—*Concluded.*

THE NAME OF COUNTY, UNITED COUNTIES, OR DISTRICT.	The number of Divisions in each County, United Counties or District.	The number of Suits entered, exclusive of Transcripts of Judgments and Judgment Summonses in each County, United Counties or District.	The amount of Claims entered, exclusive of Transcripts of Judgments and Judgment Summonses, in each County, United Counties or District.		The number of Transcripts of Judgments received from other Courts in each County, United Counties or District.	The amount of Claims received by Transcripts of Judgments from other Courts in each County, United Counties or District.		The number of Judgment Summonses issued in each County, United County or District.	The total amount of Suitors' money paid into Court in each County, United Counties or District.		The total amount of Suitors' money paid out of Court in each County, United Counties or District.		The number of Suits entered where the amount claimed exceeds $100 in each County, United Counties or District.	The number of actions for Tort where the amount claimed exceeds $10 in each County, United Counties or District.	The number of actions of Replevin where the value of the goods or other property or effects distrained, taken or detained, exceeds the sum of $10 in each County, United Counties or District.	The number of Jury Trials by Jurors summoned in each County, United Counties or District.	The amount paid to Jurors summoned in each County, United Counties or District.		The number of Jury Trials by Jurors, called in pursuance of section 122 of "The Division Courts Act," in each County, United Counties or District.	The amount payable to Treasurer for "Division Court Jury Fund" in each County, United Counties or District.		The amount of Fees and Emoluments payable to the Honourable the Treasurer for the use of the Province in each County, United Counties or District.	
			$	c.		$	c.		$	c.		$	c.						$	c.		$	c.		$	c.
Brought forward.....	285	40940	1536632	03	3523	161034	41	7129	632144	37	613363	52	3046	301		110	203	4	1718	00	66	43	1584	43	487	58
WENTWORTH	9	2256	77042	58	97	5077	28	124	30045	22	29631	13	135	1		4	4		37	00	3		75	35	133	58
YORK.....	10	5389	229359	60	208	11500	88	1126	65716	23	63550	84	513	4		4	16		91	00	.....		141	07	2330	95
Grand Totals	304	48585	1843034	21	3828	178212	57	7379	727905	81	706545	49	3744	306		118	223		1846	00	69		1800	85	2962	11
Grand Totals of 1880.....	300	71713	2377333	03	5436	199670	12	8007	894556	77	881023	78														

List of all the Division Court Clerks, their Post Office Address, the County and Number of Division in which their Court is situate, for the Province of Ontario, up to 31st December, 1882, inclusive.

County.	No. of Division.	Name of the Clerk.	Post Office Address.
Algoma	1	E. Biggings	Sault St. Marie.
	2	T. Collins	Bruce Mines.
	3	S. McLean	Little Current.
	4	W. S. Francis	Manitowaning.
	5	Jas. Fraser	Gore Bay.
Brant	1	Jos. Robinson	Brantford.
	2	E. C. Allworth	Paris.
	3	J. P. Galloway	St. George.
	4	Hy. Cox	Burford.
	5	J. R. Malcolm	Scotland.
	6	John Henderson	Onondaga.
Bruce	1	Wm. Collins	Walkerton.
	2	H. B. O'Connor	Teeswater.
	3	Jos. Barker	Kincardine.
	4	R. McKechnie	Paisley.
	5	Jos. McKinnon	Saugeen.
	6	Hugh Murray	Underwood.
	7	Geo. Stirke	Invermay.
	8	B. B. Miller	Wiarton.
	9	Jas. McLeod	Ripley.
Carleton	1	J. R. Armstrong	Ottawa.
	2	H. Rieley	Richmond.
	3	John Fenton	Huntley.
	4	W. P. Taylor	Fitzroy Harbour.
	5	H. P. Beeman	North Bower.
	6	Ira Morgan	Metcalf Osgoode.
	7	F. W. Harmer	Hintonburg.
Dufferin	1	Guy Leslie	Orangeville.
	2	Alex. McLachlin	Shelburne.
	3	J. A. Love	Stanton.
	4	G. McManus	Mono Mills.
Elgin	1	A. Love	Aylmer.
	2	Chas. Askew	St. Thomas.
	3	Chas. Askew	St. Thomas.
	4	F. McDiarmid	Rodney.
Essex	1	A. C. Verner	Sandwich.
	2	J. H. C. Leggatt	Amherstburg.
	3	E. Allworth	Kingsville.
	4	C. Bell	Colchester.
	5	Geo. A. Morse	Leamington.
	6	Chas. Barillier	Rochester.
	7	John McCrae	Windsor.
	8	John Milne	Gosfield.

List of all the Division Court Clerks, etc.—*Continued.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Frontenac	1	William Robinson	Kingston.
	2	P. McKim	Cataraqui.
	3	C. Ruttan	Loborough.
	4	A. Grant	Verona.
	5	D. J. Walker	Inverary.
Grey	1	John Stephen	Owen Sound.
	2	David Jackson	Durham.
	3	Thos. Plunket	Meaford.
	4	T. J. Rorke	Heathcote.
	5	J. W. Armstrong	Flesherton.
	6	John McDonald	Chatsworth.
Haldimand	1	Wm. Jackson	Caledonia.
	2	W. Mussen	Cayuga.
	3	T. Armour	Dunnville.
	4	R. A. Havill	Rainham.
	5	S. K. Smith	Canboro'.
	6	C. E. Bonrne	Jarvis.
Haliburton	1	C. D. Curry	Minden.
	2	C. A. Wastell	Haliburton.
Halton	1	Wm. Panton	Milton.
	2	R. Balmer	Oakville.
	3	J. Holgate	Georgetown.
	4	J. Matthews	Acton.
	5	S. R. Lister	Nassagaweya.
	6	W. S. Bastedo	Burlington.
Hastings	1	R. C. Hulme	Belleville.
	2	D. R. Ketcheson	Wallbridge.
	3	H. Holden	Shannonville.
	4	T. McCann	Tweed.
	5	F. B. Parker	Stirling.
	6	G. D. Rawe	Madoc.
	7	A. S. Valleau	Deseronto.
	8	J. Sills	Canifton.
	9	J. Simmons	Trenton.
	10	D. Bentley	Marmora.
	11	E. James	Bridgewater.
	12	J. Wilson	L'Amable.
Huron	1	J. S. McDougall	Goderich.
	2	L. Meyer	Seaforth.
	3	W. W. Farran	Clinton.
	4	A. Hunter	Brussels.
	5	T. Trivett	Exeter.
	6	Jno. Cooke	Dungannon.
	7	W. W. Connor	Bayfield.
	8	Jas. McGuire	Wingham.
	9	Jos. Cowan	Howick.
	10	M. Zeller	Zurich.
	11	John Lewis	Crediton.

List of all the Division Court Clerks, etc.—*Continued.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Kent	1	W. B. Wells, jr.	Chatham.
	2	J. Duck	Morpeth.
	3	S. Wallace	Dresden.
	4	Geo. Young	Rondeau.
	5	D. B. McDonald	Wallaceburg.
	6	Geo. Moore	Bothwell.
	7	D. R. Farquharson	Tilbury East.
Lambton	1	H. M. Pousette	Sarnia.
	2	J. D. Eccles	Watford.
	3	W. Webster	Florence.
	4	P. Cattanach	Sombra.
	5	T. R. K. Scott	Ogema.
	6	T. Kirkpatrick	Thedford.
	7	John McRae	Mooretown.
	8	W. G. Fraser	Petrolia.
	9	J. W. Brennan	Alvinston.
Lanark	1	R. Jamieson	Perth.
	2	W. H. Field	Lanark.
	3	F. McEwan	Carleton Place.
	4	W. M. Keith	Smith's Falls.
	5	John Cowan	Pakenham.
	6	J. W. Manning	Almonte.
Leeds and Grenville	1	D. B. Jones	Brockville.
	2	B. White	Prescott.
	3	S. McCammon	Gananoque.
	4	Oliver Bascom	Kemptville.
	5	E. H. Whitmarsh	Merrickville.
	6	W. H. Denaut	Delta.
	7	H. McCrae	Frankville.
	8	H. Killorn	Newton.
	9	R. B. Alguire	Farmersville.
	10	D. H. Keeler	Spencerville.
	11	R. Collorn	North Augusta.
	12	F. A. Munro	Mallorytown.
Lennox and Addington	1	Charles James	Napanee.
	2	C. L. Rogers	Bath.
	3	J. J. Watson	Adolphustown.
	4	P. Johnstone	Camden East.
	5	W. Whelan	Centreville.
	6	H. Pultz	Wilton.
	7	T. Miller	Tamworth.
Lincoln	1	W. S. Winterbottom	Niagara.
	2	W. A. Mittleberger	St. Catharines.
	3	Thos. Pearson	Smithville.
	4	C. E. Riggins	Beamsville.
Middlesex	1	Wm. J. McIntosh	London.
	2	W. Graham	Parkhill.
	3	J. Flanagan	McGillivray.
	4	C. J. Fox	Delaware.
	5	G. Wilson	Glencoe.
	6	J. English	Strathroy.
	7	R. Burdick	Dorchester.
	8	B. E. Sifton	Avon.
	9	H. Imlack	London, East.

List of all the Division Court Clerks, etc.—*Continued.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Muskoka	1	T. M. Bowerman	Bracebridge.
	2	J. H. Jackson	Severn Bridge.
	3	B. Phillips	Huntsville.
	4	R. G. Penson	Port Carling.
Nipissing	1	John McMeekin	Mattawa.
	2	John McMeekin	Mattawa.
Norfolk	1	W. R. Griffin	Simcoe.
	2	Ed. Matthews	Waterford.
	3	R. Green	Windham Centre.
	4	C. S. Harris	Courtland.
	5	W. Hewitt	Vittoria.
	6	S. P. Mabbe	Port Rowan.
	7	D. C. Brady	Houghton.
	8	Lawrence Skey	Port Dover.
Northumberland and Durham	1	F. Cubitt	Bowmanville.
	2	S. Wilmot	Newcastle.
	3	G. M. Furby	Port Hope.
	4	John Hunter	Millbrook.
	5	A. G. Boswell	Cobourg.
	6	H. Lawless	Grafton.
	7	W. Johnston	Colborne.
	8	M. P. Ketchum	Brighton.
	9	R. R. Hurlburt	Workworth.
	10	C. W. Smith	Wooler.
	11	D. Kennedy	Campbellford.
Ontario	1	D. C. Macdonell	Whitby.
	2	M. Gleeson	Greenwood.
	3	J. Burnham	Port Perry.
	4	Z. Hemphill	Uxbridge.
	5	C. Burnham	Cannington.
	6	G. F. Bruce	Beverton.
	7	F. J. Gillespie	Uptergrove.
Oxford	1	F. W. Macqueen	Woodstock.
	2	C. D. Rounds	Drumbo.
	3	D. Matheson	Embro.
	4	Jas. Barr	Norwichville.
	5	James Stevens	Ingersoll.
	6	J. Hodgson	Tilsonburgh.
	7		
Parry Sound	1	R. H. Stewart	Parry Sound.
	2	H. Armstrong	McKellar P. O.
	3	E. Sweet	Ashdown.
	4	J. McKenzie	Beggsboro'.
	5	S. G. Best	Magnetawan.
	6	Melton Carr	Commanda.

List of all the Division Court Clerks, etc.—*Continued.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Peel	1	T. A. Agar	Brampton.
	2	Lewis Shain	Streetsville.
	3	John Harris	Caledon.
	4	J. F. Warbrick	Bolton.
Perth	1	D. B. Burritt	Stratford.
	2	Thos. Matheson	Mitchell.
	3	E. Long	St. Marys.
	4	G. Brown	Shakespeare.
	5	Thos. Trow	Milverton.
	6	D. D. Hay, M.P.P	Listowel.
Peterborough	1	R. W. Errett	Peterborough.
	2	J. H. Butterfield	Norwood.
	3	T. Campbell	Keene.
	4	S. Sherin	Lakefield.
	5	C. R. D. Booth	Apsley.
Prescott and Russell	1	Robt. Hall	L'Orignal.
	2	John Shields	Vankleek Hill.
	3	W. Allison	Hawkesbury East.
	4	J. Van Bridger	Plantagenet.
	5	J. S. Cameron	Cumberland.
	6	A. Carson	Russell.
	7	R. Lawlor	Hawkesbury.
	8	J. Downing	Fournier.
	9	F. Langrell	Alfred.
	10	A. H. Edwards	Rockland.
	11	Jno. Saxon	Cambridge.
Prince Edward	1	Wm. Young	Picton.
	2	Hy. Haight	Milford.
	3	J. Hamilton	Demorestville.
	4	E. Roblin	Ameliasburgh.
	5	J. B. Garratt	Wellington.
	6	A. B. Sayler	Bloomfield.
	7	J. M. Cadman	Consecon.
	8	E. Harrison	Waupoos.
Renfrew	1	W. C. Irving	Pembroke.
	2	T. E. Thwaites	Beachburg.
	3	Geo. Eady, jr.	Renfrew.
	4	Geo. E. Keilson	Arnprior.
	5	Jas. Spenceley	Dacre.
	6	Jas. Reeves	Eganville.
	7	A. McLaren	Osceola.
	8	J. C. Gurney	Rockingham.

List of all the Division Court Clerks, etc.—*Continued.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Simcoe	1	A. J. Lloyd	Barrie.
	2	H. W. Manning	Bradford.
	3	W. H. Dickson	Beeton.
	4	A. Dudgeon	Collingwood.
	5	A. Craig	Craighurst.
	6	J. P. Henderson	Orillia.
	7	J. A. Mather	New Lowell.
	8	Thos. Gordon	Alliston.
	9	John Summis	Penetanguishene.
	10	J. C. Steele	Steele.
Stormont, Dundas and Glengarry	1	G. H. McGillivray	Williamstown.
	2	C. D. Chisholm	Alexandria.
	3	C. J. Mattice	Cornwall.
	4	A. Archibald	Dickenson's Landing.
	5	J. W. Loucks	Morrisburg.
	6	J. N. Tubble	Iroquois.
	7	W. J. Ridley	South Mountain.
	8	J. A. Cockburn	Crysler.
	9	P. Stewart	Lancaster.
	10	W. Rae	Chesterville.
	11	D. McIntosh	Monckland.
	12	J. R. McKenzie	Skye.
Thunder Bay	1	W. H. Laird	Prince'Arthur's Landing.
	2	John Aikins	English River P. O.
	3	F. J. Appjohn	Rat Portage.
	4	F. Fowler	Fort Francis.
Victoria	1	G. W. Miller	Woodville.
	2	G. Cunningham	Fenelon Falls.
	3	J. Junkin	Bobcaygeon.
	4	W. Higginbotham	Omemee.
	5	O. J. McKibbin	Lindsay.
	6	J. F. Cummings	Oakwood.
	7	F. G. Miller	Victoria Road.
Waterloo	1	A. J. Peterson	Berlin.
	2	Otto Klotz	Preston.
	3	P. Keefer	Galt.
	4	W. D. Watson	Ayr.
	5	J. Allchin	New Hamburg.
	6	R. Morrisson	Hawkesville.
	7	J. L. Wideman	St. Jacobs.
Welland	1	G. L. Hobson	Welland.
	2	E. Lees	Marshville.
	3	T. Newbigging	Fort Erie.
	4	J. A. Orchard	Drummondville.
	5	Geo. Keefer	Thorold.
	6	A. K. Scholfield	Port Colborne.

List of all the Division Court Clerks, etc.—*Concluded.*

County.	No. of Division.	Name of Clerk.	Post Office Address.
Wellington	1	A. A. Baker	Guelph.
	2	W. Leslie	Puslinch.
	3	D. L. Schultz	Rockwood.
	4	J. W. Thomson	Fergus.
	5	W. Tyler	Erin.
	6	J. McLean	Elora.
	7	G. Allen	Glenallen.
	8	J. P. Jordon	Arthur.
	9	Guy Leslie	Orangeville.
	10	A. C. R. Saunders	Harriston.
	11	J. C. Wilkes	Mount Forest.
	12	S. W. Fawcett	Drayton.
Wentworth	1	H. T. Bunbury	Hamilton.
	2	F. D. Suter	Dundas.
	3	J. McMonies	Waterdown.
	4	W. McDonald	Rockton.
	5	H. G. Jones	Stony Creek.
	6	L. A. Gurnett	Ancaster.
	7	J. McClemont	Glanford.
	8	J. S. Taylor	Binbrook.
	9	R. L. Gunn	Hamilton.
York	1	A. McL. Howard	Toronto.
	2	J. Stephenson	Unionville.
	3	J. M. Lawrence	Richmond Hill.
	4	John Cook	Newmarket.
	5	W. Fry	Sutton.
	6	A. Armstrong	Lloydtown.
	7	John Nattress	Woodbridge.
	8	John Paul	Weston.
	9	J. H. Richardson	Highland Creek.
	10	E. H. Duggan	Toronto.

List of all the Division Court Bailiffs, their Post Office Address, the County and Number of Division in which their Court is situate, for the Province of Ontario, up to 31st December, 1882, inclusive.

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Algoma	1	John Dawson	Sault Ste. Marie.
	2	James Mills	Bruce Mines.
	3	D. McKenzie	Little Current.
	4	J. Gorley	Manitowaning.
	5	E. H. Jackson	Gore Bay.
Brant	1	Joseph Jackson	Brantford.
	2	A. Huson	Paris.
	3	G. S. Waite	South Dumfries.
	4	Joseph Jackson	Brantford.
	5	Chas. Wheeland	Scotland.
	6	Matthew Day	Onondago.
Bruce	1	E. A. Healy	Walkerton.
	2	P. Corrigan	Holywood.
		John McHardy	Teeswater.
	3	T. A. Loscombe	Kincardine.
	4	W. W. Hogg	Paisley.
	5	M. Hunter	Port Elgin.
	6	Gore Leggett	Underwood.
	7	A. Neelands	Invernay.
		John D. White	Invermay.
	8	H. Trout	Wearton.
	9	Donald McDonald	Ripley.
Carleton	1	R. Hamilton	Ottawa.
	2	R. S. Wilmot	Richmond.
	3	W. A. Alexander	Huntley.
	4	R. T. Smith	Fitzroy.
	5	David Brown	North Gower.
	6	John Eastman	Osgoode.
	7	A. Wilson	Bell's Corners.
Dufferin	1	Wm. Parsons	Orangeville.
	2	Mack Howes	Waldimer.
	4	Wm. Parsons	Orangeville.
Elgin	1	W. W. White	Aylmer.
	2	Hy. Thorntop	St. Thomas.
	3	Hy. Thornton	St. Thomas.
	4	Philip Schmdz	West Lorne.
Essex	1	T. A. McKee	Sandwich.
	2	Wm. Kelly	Amherstburgh.
		W. J. Sparks	Amherstburgh.
	3	Geo. Meellott	Kingsville.
	4	P. Manning	Oxley.
	5	J. McGaw	Leamington.
	6	A. Bisson	Belle River.
	7	Jas. Cornish	Windsor.
		J. S. Askew	Windsor.
	8	Geo. Matthews	Essex Centre.

List of all the Division Court Bailiffs, etc.—*Continued.*

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Frontenac	1	M. Furlong	Kingston.
		J. H. Gardner	Kingston.
	2		
	3	J. W. Freeman	Loughboro'.
	4	M. W. Price	Arden.
		Hy. Sly	Verona.
		Samuel Mitchell	Plevna.
	5	W. Walker	Inveraray.
		Samuel Mitchell	Plevna.
Grey	1	Robt. Edgar	Owen Sound.
	2	Thos. Meredith	Durham.
	3	Andrew Watt	Meaford.
	4	A. Mitchell	Clarksburgh.
	5	O. S. Vandusen	Flesherton.
	6	W. B. Simpson	Chatsworth.
Haldimand	1	D. McGregor	Caledonia.
	2		
	3	J. Clemow	Dunville.
	4	David Byers	Selkirk.
	5	E. W. Robins	Canboro'.
	6	F. Heartwell	Jarvis.
Haliburton	1	R. C. Garrall	Minden.
	2	W. Crosthwaite	Haliburton.
Halton	1	J. A. Frazer	Milton.
	2	S. Bell	Oakville.
	3	John Hayes	Georgetown.
	4	Wm. Hemstreet	Milton.
	5	E. Chapman	Nassagawa.
	6	J. W. Henderson	Burlington.
Hastings	1	John Bull	Belleville.
	2	Geo. W. Sills	Belleville.
		J. E. Bleecker	Frankford.
	3	A. D. Steele	Shannonville.
	4	W. J. Bowell	Tweed.
	5	C. Buttler	Sterling.
	6	Henry Bull	Madoc.
	7	A. L. Bogart	Deseronto.
	8	D. Phillips	Phillipston.
	9	L. Cruckshank	Trenton.
	10	Thos. Warren	Marmora.
	11	W. Ashley	Bridgewater.
	12	Geo. McLean	L'Amable.
Huron	1	J. C. Currie	Goderich.
	2	J. Brine	Seaforth.
	3	D. Dickenson	Clinton.
	4	Thos. English	Brussels.
	5	John Gill	Exeter.
	6	Robt. Hagan	Dungannon.
	7	J. Ferguson	Bayfield.
	8	John Snell	Wingham.
	9	Joseph Cowan	Wroxeter.
	10	E. Rossenburg	Zurich.
	11	J. Banes	Crediton.

List of all the Division Court Bailiffs, etc.—*Continued.*

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Kent	1	Chas. J. Moore	Chatham.
		T. H. Nelson	Chatham.
	2	Wm. Teelzel	Morpeth.
	3	Chas. Stephens	Dresden.
	4	W. R. Fellows	Rondeau.
		John A. Little	Rondeau.
	5	Thos. Fordham	Wallaceburgh.
	6	H. F. Smith	Bothwell.
		S. J. Thomas	Bothwell.
	7	M. Dillon	Merlin.
Lambton	1	D. Adams	Sarnia.
	2	J. T. Elliott	Watford.
	3	Thos. Mead	Florence.
		J. B. McDonald	Rutherford.
	4	N. Cornwall	Sombra.
	5	Eugene Masson	Lambton.
	6	J. G. Braddon	Thedford.
	7	John Courtney	Moore.
	8	Jno. Sinclair	Petrolia.
	9	T. Cahill	Alveston.
Lanark	1	Jas. Patterson	Perth.
		D. McKenacher	Perth.
	2	Peter Kerr	Lanark.
		Robt. Watt	Lanark.
	3	Geo. McPherson	Carleton Place.
		J. McPherson	Carleton Place.
	4	H. D. Chalmers	Smith's Falls.
	5	Wm. Scott	Packenham.
	6	J. McPherson	Carleton Place.
		Jno. Slattery	Almont.
Leeds and Grenville	1	H. McPhail	Brockville.
		M. Hunter	Brockville.
	2	Jno. Stitt	Prescott.
		J. Jentherson	Prescott.
	3	S. F. Gorrinzen	Gananoque.
	4	J. Dickinson	Kemptville.
	5	P. Dowdall	Merrickville.
	6	W. H. Denant	Delta.
		S. R. Ransom	Delta.
	7	Uriah Stone	Frankville.
		R. Richards	Frankville.
	8	W. G. Mitchell	Newboro'.
		W. S. Bilton	West Point.
	9	G. W. Brown	Farmersville.
	10	Wm. Still, jr	Spencerville.
		David P. Snyder	Spencerville.
	11	S. J. Whaley	N. Augusta.
	12	F. Thompson	Mallorytown.
Lennox and Addington	1	Z. Ham	Napanee.
	2	R. K. Fuckle	Bath.
	3	D. Dawson	Adolphustown.
	4	Z. Ham	Napanee.
	5	P. Vanderwater	Centreville.
	6	John W. Denyes	Odessa.
	7	P. F. Carscallen	Tamworth.
		Dennis Craigen	Anglesea.

List of all the Division Court Bailiffs, etc.—*Continued.*

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Lincoln	1	P. Hennigan	Niagara.
	2	Wm. Brownlee	St. Catharines.
	3	A. D. Lacey	Smithville.
	4	F. B Rodgers	Bramville.
Middlesex	1	L. G. Wellsie	Dorchester Station.
	2	Edward Manes	Parkhill.
	3	G. H. Hodgins	McGillivray.
	4	J. Fitzallen	Delaware.
	5	David Gibb	Wardsville.
	6	F. Wilson	Strathroy.
	7	John Bersoby	London East.
	8	A. Cumming	Avon.
	9	H. H. Scott	Township of London.
Muskoka	1	R. H. White	Bracebridge.
	2	Joseph Nelson	Gravenhurst.
	2	T. M. Robinson	Gravenhurst.
	3	C. Peacock	Chaffey.
	4	Wm. Norris	Port Carling.
Nipissing	1		
	2	X. Ranger	Mattawa.
Norfolk	1	N. Pegg	Simcoe.
	2	Edward Grace	Waterford.
	3	D. C. Wood	Simcoe.
	4	Robt. Power	Delhi.
	5	A. Wood	Vittoria.
	6	O. J. McCall	Port Rowan.
	7	Thos. Peirce	Clear Creek.
	8	Hiram Fairchild	Port Dover.
Northumberland and Durham	1	P. Coleman	Bowmanville.
	1	Chas. Coleman	Bowmanville.
	2	J. M. Jackson	Kirby.
	3	Thomas Monaghan	Port Hope.
	4	Hy. Atkins	Millbrook.
	5	O. Dean	Cobourg.
	6	Thomas Patterson	Grafton.
	7	John Reives	Colborne.
	8	R. B. Macklean	Brighton.
	9	George H. Boyce	Warkworth.
	10	Thomas R. Garratt	Wooler.
	11	Robt. Cook	Campbellford.
Ontario	1	J. H. Palmer	Whitby.
	2	C. H. Matthias	Brougham.
	3	Jas. D. Paxton	Port Perry.
	4	J. C. Widdifield	Uxbridge.
	5	J. Baird	Cannington.
	6	Donald Ross	Beaverton.
	7	C. E. Hewitt	Atherby.

List of all the Division Court Bailiffs, etc.—*Continued.*

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Oxford	1	D. M. Perry	Woodstock.
	1	M. Vertue	Woodstock.
	2	S. D. Brown	Drumbo.
	3	James Brady	Ingersoll.
	4	Wm. Stroud	Norwichville.
	5	James Brady	Ingersoll.
	6	M. Dillon	Tilsonburg.
Parry Sound	1	T. W. George	Parry Sound.
	2	W. J. Moffatt	McKellar.
	3	John Holton	Rosseau.
	4	John Boys	Beggsboro'.
	5	Allan Kennedy	Chapman Township.
	6	John Risker	Gurd Township.
Peel	1	Wm. Broddy	Brampton.
	2	R. Irwin	Streetsville.
	3	James McQuainn	Caledon.
	4	J. C. Switzer	Albion.
Perth	1	Thos. Tobin	Thetford.
	1	Thos. S. Tobin	Thetford.
	2	J. S. Coffin	Mitchell.
	3	Wm. Box	St. Mary's.
	4	J. W. Donaldson	S. Easthope.
	5	J. M. Scott	Melowton.
	6	J. B. Lorn	Listowell.
	6	Robt. Hay	Listowell.
Peterboro'	1	Chas. Stapleton	Peterboro'.
	2	A. R. Anderson	Norwood.
	3	A. W. McIntyre	Keene.
	4	R. Chopins	Lakefield.
	5	Thos. Giles	Apsley.
Prescott and Russell	1	Geo. Gale	L'Orignal.
	2	Thos. Shields	Vankleek Hill.
	3	P. Kelly	St. Eugene.
	4	J. L. McKay	Plantagenet.
	5	C. H. Cameron	Cumberland.
	6	L. Goulest	Emburn.
	7	M. Costello	L'Orignal.
	8	C. Gates	Fournier.
	9	Chas. Rivier	Alfred.
	10	Chas. Woodley	Rockland.
	10	E. M. Casselman	Cambridge.
Prince Edward	1	A. M. Buchanan	Pictou.
	2		
	3	Edwd. Nixon	Demorestville.
	4	A. Harvey	Ameliasburgh.
	5	Thos. Jackson	Wellington.
	6	Alex. McDonald	Hallowell.
	7		
	8	L. E. Rose	Weepoos.

List of all the Division Court Bailiffs, etc.—*Continued.*

County.	No. of Division.	Name of Bailiff.	Post Office Address
Renfrew	1	H. Guppy	Pembroke.
		James Miller	Pembroke.
	2	A. Acheson	Westmeath.
		Jno. Beaupon	Beechburgh.
	3	S. O. Gorman	Renfrew.
	4	Wm. Wilson	Arnprior.
	5	John Burns	Dacre.
	6	M. J. Kearny	Eganville.
	7	Geo. Marshall	Coborn.
	8	Levi Lord	Rockingham.
Simcoe	1	Alex. Morrow	Barrie.
	2	Wm. Young	Lemonville.
	3	S. H. Washburn	Beeton.
	4	Robt. Jordan	Collingwood.
	5	Joseph Swan	Craighurst.
		James Martin	Medonte.
	6	J. G. Wilson	Orillia.
		Thos. W. Moffatt	Orillia.
	7	John Orr	Sunnedale.
	8	F. M. Woolcock	Alleston.
	9	A. Sneath	Penetanguishene.
	10	Geo. B. Ormsby	Oro.
Stormont, Dundas and Glengarry	1	J. H. Robertson	Martintown.
	2	S. R. McLeod	Alexandria.
		Robt. Macdonell	Alexandria.
	3	D. McDonell	Cornwall.
	4	H. Bush	Lunenburgh.
		L. Warner	Ornabruck Centre.
	5	Jacob Hopper	Morrisburgh.
	6	W. L. Redmond	Iroquois.
	7	A. Redmond	South Mountain.
	8	Archd. McIntosh	South Finch.
	9	J. A. Robertson	Martintown.
	10	A. Stillmeyer	Chesterville.
	11	Peter McIntosh	Monckland.
	12	R. Macdonell	Alexandria.
		S. R. McLeod	Alexandria.
Thunder Bay	1	John Rowke	Prince Arthur's Landing.
	2	Joseph McKinnon	English River.
	3	H. H. McKay	Woodstock.
	4	Robt. Scott	Fort Francis.
Victoria	1	Benj. D. Seaman	Woodville.
	2	John Austin	Fenelon Falls.
	3	Thos. Cheetham	Bobcaygeon.
	4	Geo. A. Balfour	Omemee.
	5	Geo. McHugh	Lindsay.
	6	E. A. Bowes	Oakwood.
	7	John R. Graham	Victoria Road.
Waterloo	1	J. Klippert	Berlin.
	2	John Kirkpatrick	Galt.
	3	Thos. Field	Galt.
		John Kirkpatrick	Galt.
	4	E. Bouchier	Washington.
	5	J. B. Cook	New Hamburgh.
	6	R. Thompson	Hawkesville.
	7	R. Thompson	Hawkesville.

List of all the Division Court Bailiffs, etc.—*Concluded.*

County.	No. of Division.	Name of Bailiff.	Post Office Address.
Welland	1	Benj. Bearss	Welland.
	2	Edwd. Henderson	Merrickville.
	3	Geo. Graham	Fort Erie.
	4	J. D. Fralick	Drummondville.
	5	Geo. McArthur	Thorold.
	6	A. Bryer	Port Colborne.
Wellington	1	P. Spragge	Guelph.
	2	Thos. Ingram, jr	Puslinch.
	3	Wm. Hunstreet	Rockwood.
	4	Archd. McMillan	West Garafraxa.
	5	Jas. Broddy	Erin.
	6	Wm. Findlay	Elora.
	7	Geo. Mellis	Glenallan.
	8	James Hay	Arthur.
	9	Wm. Parsons	Orangeville.
	10	J. Livingston	Harriston.
	11	A. Godfrey	Mount Forest.
	12	S. B. Frank	Drayton.
Wentworth	1	H. S. Nixon	Hamilton.
	2	F. P. Hanes	Dundas.
	3	Jno. Graham	Waterdown.
	4	R. Banman	Rockton.
	5	S. Springster	Stony Creek.
	6	W. H. Thuresson	Ancaster.
	7	James Hayes	Binbrook.
	8	James Hayes	Binbrook.
	9	J. Greenfield	Hamilton.
York	1	J. W. Wingfield	Parkdale.
		St. John Severs	Toronto.
	2	James Stewart	Toronto.
	3	James Stewart	Toronto.
	4	Wm. Malloy	Sharon.
	5	R. H. Sheppard	Georgina.
	6	Jas. W. Crossley	King.
	7	James Stewart	Toronto.
	8	James Stewart	Toronto.
	9	W. Lake	Highland Creek.
	10	Peter Small	Toronto.

REPORT

OF

THE HON. THE PROVINCIAL SECRETARY

ON THE WORKING OF THE

TAVERN AND SHOP LICENSES ACTS,

FOR THE YEAR

1882.

Printed by Order of the Legislative Assembly.

Toronto:
PRINTED BY C. BLACKETT ROBINSON, 5 JORDAN STREET.
1883.

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CORRECTIONS.

Page 16, last line, for the number "6," read 5.

" 17, last line, for the number "13," read 12.

LICENSE REPORT.

PROVINCIAL SECRETARY'S OFFICE,

LICENSE BRANCH,

TORONTO, January, 1883.

To the Honourable JOHN BEVERLEY ROBINSON,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour herewith to submit the Seventh Annual Report and accompanying Schedules respecting the operation of the Liquor License Laws.

Schedule A is a comparative statement of the number of licenses, of the various denominations, issued, extended, transferred, or removed, in the several License Districts of the Province, during the license years 1879–80, 1880–1 and 1881–2, respectively, and of the License Duties, Fees and Fines received by the Province as its proportion during the same years.

The total number of licenses so issued may be concisely stated thus:

YEAR.	Tavern.				Shop.	Wholesale.	Vessel.		Total.
	Yearly.		Six Months.						
	Ordinary.	Beer and Wine.	Ordinary.	Beer and Wine.			Ordinary.	Beer and Wine.	
1879-80	3,199	.....	29	.....	757	42	22	.....	4,049
1880-1	3,227	.....	29	.....	760	40	22	.....	4,078
1881-2	3,277	34	27	3	764	34	23	1	4,163

The revenue derived by the Province, from this source, was, in

1879–80	$87,198 19
1880–1	89,207 14
1881–2	91,948 75

NUMBER OF LICENSES ISSUED—INCREASE AND DECREASE.

Of the eighty-five tavern licenses here shewn to have been issued in 1881–2 in excess of the issue of 1880–1, thirty-fivewere Beer and Wine Licenses, and eleven are assignable to the unorganized Districts.

Deducting six months' licenses, which are issued in exceptional cases only—principally to places largely resorted to in summer—and taking the figures from 1874 down to the close of the license year 1881–2, we have the following:

Number of licenses (tavern, shop, etc.,) issued in 1874, under the Act then in force	6,185
Number issued in 1876, under the "Crooks Act"	3,938
" in 1877	3,676
" " 1878	3,715
" " 1879	4,020
" " 1880	4,049
" " 1881	4,133

It will be seen from the above that the reduction of licenses in 1876, as compared with 1874, was more than one-third.

By comparing the total number of licenses issued in 1876	3,938
With the number issued in 1881	4,133
We find that there has been an increase of	195

Under the present License Act the number of tavern licenses to be issued is based, in Cities, Towns and Villages, upon the population of the municipality. Many of the Boards of Commissioners determine the number to be issued in the rural municipalities also by reference to the population.

Somewhat apart from the general increase of population, there are other influences which have perceptibly affected the total number issued in later years, and to which may be assigned, in part, an increase in the number issued, of 195 in 1881 over 1876. Some of these are as follows:—

In 1876, the Dunkin Act was in force in the following municipalities, consequently no licenses were issued therein during that year; but the Act having been repealed, licenses have since been issued, and the numbers so issued in 1881–2 were:—

County of Prince Edward	28	
Township of Elizabethtown	8	
" Plympton	3	
" Ramsay	3	
" Wolford	2	
" Ernestown	5	
" Dysart	3	
Village of Deseronto	5	
" Merrickville	4	
" Bobcaygeon	3	
		64

Between the years of 1876 and 1881 twenty-eight new municipalities were formed within the Province, and during the latter year 91 licenses were issued within them. But as some of these municipalities originally formed part of others, and licenses had issued therein prior to the creation of the new ones, it is estimated that the increased number issued in consequence of the change was about.. 37

The Districts of Algoma, Thunder Bay, Muskoka, Parry Sound, and Nipissing have also very largely increased in population between the years 1876 and 1881, and many new municipalities have been formed in these Districts during that period, and as a consequence, the increased number of licenses issued in such municipalities and in the unorganized portions of these Districts, has been..... 64

The 16th Section of the License Act provides that, where in certain cases there has been an increases of population, since the last Dominion census, municipal councils may memorialize the Lieutenant-Governor in Council setting forth the fact of such increase, and that an additional number of licensed taverns is needed for the convenience and accommodation of travellers, and praying for authority to take a new census. Between 1876 and 1881, 40 municipal councils memorialized the Lieutenant-Governor in Council for authority to take a new municipal census within their respective municipalities as provided by the Act. In some of these, the increase of population was found to be not sufficient to warrant additional licenses. In the others, the increase is estimated to have been about	30	
		195

It will, therefore, be seen that municipal and other changes which have an effect upon the number of licenses to be issued from year to year are constantly taking place in the Province, and that it is scarcely possible to make a comparison of one year with another and show definitely, and with entire certainty, where the numbers do not greatly vary, whether there has been a relative increase or not.

Between 1876 and 1881 the "Dunkin Act" was, for a longer or shorter period, in force in thirteen Counties of the Province, and also in a number of minor municipalities. During the time the Act was in force no licenses were issued in any of the thirteen counties or in such minor municipalities, but upon the repeal of the Act, they were issued as in other municipalities. To these causes may be attributed the variations in the number of licenses issued during the years mentioned.

In Schedule B is given a comparative statement of the licenses issued within the limits of the several Counties of the Province, and in Cities, during the respective license years from 1871 to 1881–2, inclusive.

Financial.

Schedule C is a comparative statement, in detail, for the years 1879–80, 1880–1 and 1881–2, respectively, of the licenses of various denominations, other than vessel licenses, issued, extended, transferred, or removed, in each City, Town, Township, and Village Municipality of the Province; the amounts collected in respect thereof, and on account of fines in each municipality; and of the amounts paid to the municipalities, respectively, as their proportion, after making nescessary deductions.

The amount, so collected, for the year 1881-2, was $423,933.53; and if the sum of $2,190.00, collected for vessel licenses, be added, the sum total would be $426,123.53.

Of the sum last mentioned, $276,983.79 was paid over to the municipalities and $91,948.75 was paid to the Province, as is before stated.

Schedule D contains a statement of the Fines collected in the several License Districts, during the years 1880-1 and 1881-2, respectively, in cases prosecuted by the License Inspectors.

These Fines amounted to, in 1880-1	$18,937 00
And in 1881-2 to	17,301 44

This slight decrease may doubtless be attributed in part to the increased watchfulness of the police authorities during the year, and in part to the greater vigilance of the Inspectors. These efforts of the police and Inspectors have, it is believed, resulted in driving out of the business numbers who were formerly engaged in the illicit traffic.

In the same schedule is also given the amounts paid for expenses of Commissioners and Salaries of Inspectors for the same years 1880-1 and 1881-2, the aggregates being, for

1880-1	$46,449 96
1881-2	46,796 40

Schedule E is a statement of the number of commitments for drunkenness to the several County Gaols and lock-ups, throughout the Province, during the years 1876, 1877, 1878, 1879, 1880, 1881, and 1882, respectively. It will be observed that the number so committed during the past year was less than during any year referred to except 1881.

Schedule F contains a statement of the number of licenses issued in each Municipality, and in each License District of the Province, during the license year 1881-2, and shews also:

(1.) The amount actually paid, in each case, to the Government, including its proportion of the fines, after deducting expenses;

(2.) The amount that would have been paid to the Government under the Act of 1868-9, assuming the same number of licenses to have issued under that Act as were issued in 1881-2, but without regard to fines or expenses;

(3.) The amount actually paid to each municipality, *including* any excesses over the statutory duties, imposed by municipal by-laws, and its proportion of fines, after deducting expenses;

(4.) The amount so actually paid to each municipality, *exclusive* of such excesses, over the statutory duties; and

(5.) The amount that would have been paid to the municipality under the Act of 1868-9, not including any excesses over the statutory duties, imposed by municipal by-laws, and without regard to fines or expenses.

Financial Effect of the present Act and the Act of 1868-9.

The aggregate of the sums so actually paid to the Government during the year 1881-2 (including its proportion of the fines, but not including the sum of $2,190 received for vessel licenses) was $89,758.75; and the amount that would have been so payable to the Government, under the Act of 1868-9, was $53,730.00, which, deducted from the sum of $89,758.75, leaves $36,028.75, which was actually paid to the Government, in 1881-2, in excess of what would have been paid under the Act of 1868-9.

The amount actually paid to the municipalities during the year 1881-2 (including their proportion of fines, and $103,221.17 of excesses over the statutory duties) was $276,983.79.

The amount so actually paid to the municipalities, during the year 1881-2, apart from the excesses alluded to, was $173,762.62; the amount that would have been so paid to the municipalities, under the Act of 1868-9, is $133,704.00, which, if deducted from $173,762.62, leaves $40,058.62, actually paid to the municipalities in 1881-2, in excess of what would have been payable to them under the Act of 1868-9. The amount of excesses also paid to the municipalities in 1881-2 in addition to the above sum was, as is before stated, $103,221.17.

Financial Effect of present Act and the Act of 1874.

To illustrate the financial effect of the change from the Act of 1874 to the Crooks Act, and that by the change in the law the Government has not taken from the municipalities the fees which the latter were entitled to under the old Act, figures have been compiled with respect to six of the principal Counties in the Province, as set out in the following table, which shews:—(1) The number of licenses of all kinds issued in the counties mentioned from 1876-7 to 1880-1, inclusive; (2) The amounts the municipalities would have received under the Act of 1874; (3) The amounts actually received by them under the present Act; (4) The amount in favour of the municipalities under the present Act; (5) The amount the Government would have been entitled to under the Act of 1874 and under the present Act, respectively:

COUNTY.	Year.	Tavern License.		Shop License.		Wholesale License.	Total.	Total amount of Statutory Fees that would have been paid to the several municipalities in the county under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the several municipalities under the Crooks Act after deducting all expenses.	Total increased payments to municipalities in favour of the Crooks Act.	Total amount that would have been paid to the Government under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the Government under the Crooks Act after deducting all expenses.	Total increased payments to Government.	Total decreased payments to Government.
		Town.	Township.	Town.	Township.			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
.....	1877–8	26	43	15	3	1	88	2,155 00	5,794 23	3,639 23	1,795 00	1,735 85	.....	59 15
	1878–9	25	44	15	3	2	89	2,135 00	6,009 28	3,874 28	1,835 00	1,757 15	.....	77 85
	1879–80	26	45	14	4	3	92	2,165 00	5,897 19	3,732 19	1,945 00	2,051 12	106 12	.....
	1880–1	26	44	16	3	2	91	2,205 00	6,015 25	3,810 25	1,885 00	2,032 62	147 62	.....
	1877–81	103	176	60	13	8	367	8,660 00	23,715 95	15,055 95	7,460 00	7,576 74	253 74	137 00
Lambton	1877–8	14	51	10	15	.....	90	1,850 00	5,366 20	3,516 20	1,610 00	1,711 93	101 93	.....
	1878–9	16	54	10	17	.....	97	1,995 00	6,136 73	4,141 73	1,735 00	1,863 22	128 22	.....
	1879–80	17	55	10	16	.....	98	2,030 00	6,040 83	4,010 83	1,758 00	1,970 38	212 38	.....
	1880–1	16	55	9	16	.....	96	1,960 00	6,015 72	4,055 72	1,708 00	1,860 36	152 36	.....
	1877–81	63	215	39	64	.....	381	7,835 00	24,159 48	16,324 48	6,811 00	7,405 89	594 89	.....
Oxford	1877–8	22	48	7	3	.....	80	1,800 00	5,362 86	3,562 86	1,510 00	1,623 76	113 76	.....
	1878–9	22	49	6	4	.....	81	1,795 00	4,824 68	3,029 68	1,515 00	1,534 83	19 83	.....
	1879–80	22	52	8	4	.....	86	1,910 00	5,380 77	3,470 77	1,610 00	1,715 38	105 38	.....
	1880–1	22	52	10	4	.....	88	1,920 00	5,705 56	3,785 56	1,660 00	1,782 76	122 76	.....
	1877–81	88	201	31	15	.....	335	7,425 00	21,273 87	13,848 87	6,295 00	6,656 73	361 73	.....
Huron	1877–8	22	102	7	9	.....	140	2,710 00	4,597 08	1,887 08	2,420 00	2,564 97	144 97	.....
	1878–9	24	103	8	12	.....	147	2,875 00	4,899 01	2,024 01	2,555 00	2,811 69	256 69	.....
	1879–80	24	110	8	13	.....	155	2,995 00	8,433 26	5,438 26	2,675 00	2,950 37	275 37	.....
	1880–1	24	107	6	10	.....	147	2,835 00	7,734 36	4,899 36	2,535 00	2,727 18	192 18	.....
	1877–81	94	422	29	44	.....	589	11,415 00	25,663 71	14,248 71	10,185 00	11,054 21	869 21	.....

COUNTY.	Year.	Tavern License.		Shop License.		Wholesale License.	Total.	Total amount of Statutory Fees that would have been paid to the several municipalities in the county under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the several municipalities under the Crooks Act before deducting all expenses.	Total increased payments to municipalities in favour of the Crooks Act.	Total amount that would have been paid to the Government under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the Government under the Crooks Act after deducting all expenses.	Total increased payments to Government.	Total decreased payments to Government.
		Town.	Township.	Town.	Township.			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Perth	1877–8	35	70	14	3	.....	122	2,875 00	6,060 27	3,185 27	2,120 00	2,557 82	437 82	.....
	1878–9	36	69	12	5	.....	122	2,840 00	7,529 33	4,689 33	2,155 00	2,446 45	291 45	.....
	1879–80	37	73	13	5	.....	128	2,970 00	8,850 85	5,880 85	2,470 00	2,750 43	280 43	.....
	1880–1	38	72	13	6	.....	129	3,005 00	8,908 55	5,903 55	2,495 00	2,696 80	201 80	.....
	1877–81	146	284	52	19	....	501	11,690 00	31,349 00	19,659 00	9,240 00	10,451 50	1211 50	.....
Waterloo	1877–8	21	63	11	6	.....	101	2,175 00	5,770 62	3,595 62	1,855 00	2,022 29	167 29	.....
	1878–9	22	65	11	6	....	104	2,255 00	5,069 87	2,814 87	1,910 00	1,995 40	87 40	.....
	1879–80	22	67	10	5	.....	104	2,220 00	5,101 75	2,881 75	1,900 00	2,080 90	180 90	.....
	1880–1	22	65	10	5	.....	102	2,190 00	5,019 63	2,829 63	1,870 00	2,034 55	164 55	.....
	1877–81	87	260	42	22	.....	411	8,840 00	20,961 27	12,121 27	7,535 00	8,133 12	598 12	.....

RECAPITULATION.

COUNTY.	Year.	Tavern License.		Shop License.		Wholesale License.	Total.	Total amount of Statutory Fees that would have been paid to the several municipalities in the county under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the several municipalities under the Crooks Act after deducting all expenses.	Total increased payments to municipalities in favour of the Crooks Act.	Total amount that would have been paid to the Government under the Act in force prior to the Crooks Act.	Amounts that were actually paid to the Government under the Crooks Act after deducting all expenses.	Total increased payments to Government.	Total decreased payments to Government.
		Town.	Township.	Town.	Township.			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Essex	1877-81	103	176	60	13	8	367	8,660 09	23,715 95	15,055 95	7,460 00	7,576 74	253 74	137 00
Lambton	1877-81	63	215	39	64	.....	381	7,835 00	24,159 48	16,324 48	6,811 00	7,405 89	594 89	.....
Oxford	1877-81	88	201	31	15	.....	335	7,425 00	21,273 87	13,848 87	6,295 00	6,656 73	361 73	.....
Huron	1877-81	94	422	29	44	.....	589	11,415 00	25,463 71	14,248 71	10,185 00	11,054 21	869 21	.....
Perth	1877-81	146	284	52	19	.....	501	11,690 00	31,349 00	19,659 00	9,240 00	10,451 50	1211 50	.....
Waterloo	1877-81	87	260	42	22	.....	411	8,840 00	20,061 27	12,121 27	7,535 00	8,133 12	598 12	.....
Totals	.....	581	1558	253	177	8	2,584	55,865 00	147,123 28	91,258 28	47,526 00	51,278 19	3,889 19	137 00

An examination of these figures will show that, after deducting all expenses of enforcing the Act, including the salaries of the Inspectors, etc., etc., these municipalities have been paid, out of the license funds every year since the Crooks Act came into force, very nearly treble the amount they would have received under the preceding Act from the same number of licenses, while the amounts received by the Government have been but very slightly increased, and in some cases have been diminished. In the amounts paid to the municipalities under the Crooks Act, the excesses over the statutory duties imposed by municipal by-laws have been included. There are no records in the Department showing whether, prior to the Crooks Act, these municipalities imposed any fee in excess of the statutory duties; if they did, such excesses should be added to the amounts that would have been paid to them. In many municipalities, it is known that no such excesses were imposed; it is therefore assumed that if any were imposed in any of the municipalities in these counties, they would not in the aggregate amount to a large sum.

Applying the same principle to all the Counties and Districts within the Province collectively, it has been ascertained that the results are similar—the municipalities receiving a large increase of revenue, and the Government receiving in some cases more and in others less.

YEAR.	No. of Tavern and Shop Licenses.	Number of Wholesale Licenses.	Total.	Amounts that would have been paid to Municipalities under Act of 1874.	Amounts that were actually paid under present Act after deducting all expenses.	Difference under present Act in favour of the Municipalities.	Amounts that would have been paid to Government under Act of 1874.	Amounts that were actually paid to the Government under present Act after deducting all expenses.
				$ c.	$ c.	$ c.	$ c.	$ c.
1876-7.....	3,763	147	3,910	104,740 00	275,787 04	171,047 04	75,860 00	79,589 81
1877-8.....	3,551	67	3,618	92,330 00	249,257 55	156,927 55	74,060 00	74,916 55
1878-9.....	3,634	52	3,686	93,400 00	229,902 52	136,502 52	74,380 00	72,313 05
1879-80 ...	3,976	42	3,998	100,095 00	269,647 28	169,552 28	79,625 00	87,198 19
1880-1.....	3,987	40	4,027	100,550 00	273,467 38	172,917 38	79,950 00	89,207 14
				491,115 00	1,298,061 77	806,946 77	383,875 00	403,224 74

In the two preceding statements, the amounts represented as having been actually paid to the Municipalities and Government, respectively, out of the License Funds, are exclusive of the expenses of enforcing the Act. The estimate of the probable cost to the municipalities, or to the Government, of enforcing the Act of 1874 has not been taken into consideration or deducted from the amounts that would have been paid to them respectively under that Act. Had such deductions been made, the amounts payable to the municipalities would have been very considerably lessened.

Allegations of Political Favouritism Refuted.

The accusations, heretofore controverted, to the effect that Inspectors and Boards of Commissioners had shewn political favouritism in granting or withholding Licenses, having been repeated, it has been thought well to set out, in statistical form, in Schedule H hereto, the latest facts officially reported to this Department in relation thereto, namely, those returned during the license year 1880-1.

Adopting the language and figures of my Report of 1880, it will be seen by reference to the Schedule that of 1,266 applications from Reformers, 1,102 were

granted and 164 refused; of 2,978 applications from Conservatives, 2,704 were granted and 274 refused; and of 319 applications from persons belonging to neither political party (chiefly women,) 252 were granted and 67 refused. The grants to Reformers were thus about 87 per cent. of their applications; to Conservatives, nearly 91 per cent.; and to non-politicians, 79 per cent. Further, of the total number of these applicants for licenses, about 28 per cent. were Reformers, 65 per cent. Conservatives, and 7 per cent. Non-politicians; and of the total number of licenses actually granted, Conservatives received about 67 per cent.; Reformers, 27 per cent.; and Non-politicans, 6 per cent.

The following table shews the results of these returns in a complete form:—

CLASS.	No. of applicants for Licenses.	No. of Licenses granted.	Proportion of applications from each class to total No. of applications—percentage.	Proportion of Licenses in each class to total No. of Licenses—percentage.	Proportion of the applicat'ns from each class granted—percentage.	Proportion of the applicat'ns from each class refused—percentage.
Reformers ...	1,266	1,102	27.74	27.16	87.04	12.96
Conservatives	2,978	2,704	65.26	66.63	90.80	9.20
Non-poli'cians	319	252	7.00	6.21	79.00	21.00
	4,563	4,058	100.00	100.00	.... .	.....

The difference between the number of licenses granted, as here given, and as shewn in Schedules A, B, and C, to my Report of 1880, is due to the returns for the purposes of the present statement having been made at a period subseqent to the receipt in the Department of the statements from which Schedules A, B, and C were compiled, and the fact that the returns in part refer to licenses issued after the completion of the statements.

In this connection it will not be out of place to reduce to like proportions, and compare with the above the figures of a similar return, published in the License Report for 1876, leaving out those relating to non-politicians, who found no place in that report. The other classes stood in the following proportions:—

	1876-7.		1880-1.	
	Reformers.	Conservatives.	Reformers.	Conservatives.
1. Percentage of total number of applicants for license	30.44	69.56	29.83	70.17
2. Percentage of total number of licenses granted	30.45	69.55	28.95	71.05
3. Proportion of their respective applications granted to each class	75.10	75.08	87.05	90.80

The practical result is that in 1876-7 there was a percentage granted in favour of Reformers ·02, which was changed in 1880-1 to a percentage in favour of Conservatives of 3·75.

MISCELLANEOUS.

As stated in my report of last year, the voting in the County of Halton was favourable to the introduction of the Scott Act. The Act came into force on the first day of May last, the day after the expiration of the licenses issued during the preceding license year under the License Act. No licenses, under the latter Act, have consequently issued during the current license year, 1882–3.

I beg, further, to advise Your Honour that, during the past season, I caused an inspection to be made of nearly all the License Districts throughout the Province, and an examination of the books and accounts of the Inspectors. The books and papers in possession of the Inspectors were, in nearly all cases, found to be kept in a very satisfactory manner.

I have pleasure in reporting to Your Honour, that the quarterly returns indicate that the Inspectors continue their visits of inspection of the various premises licensed by the Boards, and that as close a supervision is exercised by them over their several Districts as the duties to be performed, and the extent of territory to be traversed, will fairly admit of.

The annual reports regarding the financial standing of the bondsmen of the several Inspectors have also been received and, upon examination, have been found to be quite satisactory. In cases where bondsmen have died, become insolvent or left the limits, other sureties have been substituted.

Respectfully submitted.

ARTHUR S. HARDY,

Provincial Secretary.

SCHEDULES.

SCHEDULE A.

COMPARATIVE STATEMENT, BY LICENSE DISTRICTS, shewing the number of Tavern, Shop, transferred or removed, and the amount of Revenue received by the Province there- 1881–2, respectively.

LICENSE DISTRICT.	Tavern Licenses Issued.							Tavern Licenses Extended.			Shop Licenses Issued.		
	Yearly Licenses.				Six Months' Licenses.								
	Ordinary.			Beer and Wine.	Ordinary.			Beer and Wine.					
	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
Addington	44	39	40	.....	....	....	....	....	....	....	2	2	2	2
Algoma	8	13	17	.....	....	....	....	....	....	....	....	5	3	5
Brant, North	18	21	19	.....	....	....	....	....	....	....	....	2	2	2
Brant, South	37	36	36	.....	....	....	....	....	....	2	1	12	12	12
Brockville and South Leeds.	56	57	53	.....	....	....	....	....	....	....	5	10	12	12
Bruce, North	34	36	40	..	1	1	2	.. ..	..	1	....	4	5	6
Bruce, South	59	62	65	....	....	....	1	.....	....	....	1	8	9	9
Cardwell	35	44	42	.....	....	....	....	....	....	....	....	3	6	6
Carleton	28	29	36	.....	....	....	....	....	....	....	....	1	3	3
Cornwall	24	22	24	.....	....	....	....	....	....	2	..	5	5	5
Dufferin	29	32	32	1	....	....	....	....	....	....	....	5	6	7
Dundas	26	26	27	.. ..	....	1	....	....	....	....	....	4	4	4
Durham, East	27	29	29	3	....	....	....	....	....	....	1	7	7	8
Durham, West	18	19	18	.....	1	....	....	....	....	1	....	4	4	4
Elgin	72	74	74	.....	1	1	1	.....	....	....	2	16	12	13
Essex, North	49	48	50	.....	....	....	1	.....	....	....	....	14	15	16
Essex, South	22	22	24	.....	1	1	....	....	....	....	....	4	4	5
Frontenac	16	16	16	.....	....	....	....	....	....	....	....	....	....	....
Glengarry	25	28	31	....	....	....	....	....	....	....	....	7	7	7
Grey, East	31	31	31	.....	....	....	....	....	....	....	1	2	4	3
Grey, North	28	26	27	1	....	....	....	....	....	....	....	4	6	7
Grey, South	25	24	24	1	....	....	....	....	....	....	....	4	5	6
Haldimand	42	40	42	.....	....	....	....	....	....	....	....	3	3	3
Halton	42	41	41	.....	2	1	1	.....	....	....	....	1	1	1
Hamilton	68	74	87	2	1	1	....	2	6	1	....	61	57	55
Hastings, East	33	29	27	.....	....	....	....	....	....	....	....	1	1	2
Hastings, North	24	25	24	.....	....	....	....	....	....	....	....	5	6	6
Hastings, West	37	37	39	.....	....	1	1	....	....	1	4	9	9	7
Huron, East	37	36	37	.....	....	....	....	....	....	....	....	2	1	1
Huron, South	48	47	45	.....	....	....	....	.....	1	1	2	10	8	7
Huron, West	49	48	46	....	....	....	....	....	....	1	2	9	7	7
Kent, East	40	41	43	.....	....	....	....	....	....	....	....	8	7	6
Kent, West	27	26	26	.....	....	....	....	....	....	....	....	6	6	7
Kingston	62	62	62	2	....	....	....	....	....	....	....	20	20	20
Lambton, East	29	29	28*	1*	1	1	1*	.....	....	....	....	7	9	7*
Lambton, West	43	42	42*	1*	2	....	....	.....	....	....	....	19	16	15*
Lanark, North	18	18	18	....	....	....	....	....	....	....	....	2	2	2
Lanark, South	15	16	18	.....	1	....	....	....	....	....	....	4	6	4
Leeds and Grenville, North, and South Grenville	41	40	36	....	....	....	....	.....	....	....	1	8	8	6
Lennox	13	17	17	1	....	....	....	....	....	....	....	3	4	4
Lincoln	67	68	63	.....	6	5	5	....	....	....	3	16	12	14
London	57	45	45	....	....	....	....	1	1	14	4	36	27	24
Middlesex, East	72	68	71	.....	....	1	.....	....	...	1	....	10	8	8
Middlesex, North	35	33	32	.....	....	....	.....	....	....	....	1	5	6	6

* These were issued for the last ten months of the year, four licenses having been issued

† and 1 extended.

SCHEDULE A.

Wholesale, Six Months' and Vessel Licenses issued, and the number of Licenses extended, from, including its proportion of Fines, in the license years 1879-80, 1880-1 and

Shop Licenses Extended.			Wholesale Licenses Issued.			Vessel Licenses Issued.				Licenses Transferred and Removed.				Total.			Proportion of License Duties, Fees for Transfers and Removals and Fines, received by the Province.		
						Ordinary.			Beer and Wine.	Transfers.		Removals.							
1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
																	$ c.	$ c.	$ c.
....	....	....	..	..	....	....	....	....	.....	3	3	....	1	46	44	48	657 89	691 01	703 42
....	....	....	..	..	....	....	....	....	.....	....	7	....	....	13	16	29	331 93	461 38	708 64
....	....	....	..	..	....	....	....	....	.....	....	2	1	....	20	24	23	357 04	377 54	376 30
....	....	....	1	1	1	....	....	....	.....	....	6	....	....	50	51	56	1273 36	1269 14	1233 17
....	....	....	..	1	....	....	....	....	.....	....	4	....	....	66	70	74	1282 47	1366 66	1361 03
....	....	....	..	..	....	....	....	....	.....	....	1	....	....	39	43	49	664 83	723 77	813 67
....	....	....	..	..	....	....	....	....	.....	1	14	....	....	67	72	90	1286 60	1387 42	1446 99
....	....	....	..	..	....	....	....	....	.....	3	7	....	....	38	53	55	628 01	881 62	852 26
....	....	....	..	..	....	....	....	....	.....	....	1	....	....	29	32	40	396 96	461 08	553 66
....	....	....	..	..	....	....	....	....	.....	1	3	....	....	29	30	32	545 40	537 86	580 10
....	....	....	..	..	....	....	....	....	.....	1	8	....	....	34	39	48	627 70	720 11	754 96
....	....	....	..	..	....	....	....	....	.....	....	1	....	....	30	31	32	424 73	455 03	490 68
....	....	....	..	..	....	1	1	1	.....	....	2	....	2	35	37	46	666 66	667 79	853 09
....	....	....	..	..	....	....	....	....	.....	....	6	....	..	23	24	28	390 23	389 45	370 89
....	....	....	..	..	....	....	....	....	.....	....	16	....	2	89	87	108	1747 56	1780 90	2028 73
....	....	....	3	2	2	1	1	..	.....	1	5	....	....	67	67	74	1539 72	1480 71	1509 62
....	....	....	..	..	....	....	....	....	.....	....	4	....	..	27	27	33	511 40	551 91	560 44
....	....	....	..	..	....	....	....	....	.....	....	1	....	....	16	16	17	158 15	182 81	176 00
....	....	....	..	..	....	....	....	....	.....	....	....	....	....	32	35	38	502 59	581 03	646 73
....	....	....	..	..	....	....	....	....	.....	....	5	....	....	33	35	40	501 73	572 18	575 77
....	....	....	1	1	....	1	2	1	.....	....	10	....	....	34	35	46	747 17	881 03	724 17
....	....	....	..	..	....	....	....	....	.....	2	7	....	1	29	31	39	474 68	447 71	527 82
....	....	....	..	..	....	....	....	....	.....	....	....	....	....	45	43	45	757 25	756 76	768 00
....	....	....	..	..	....	....	....	....	.....	....	2	....	....	45	43	45	793 73	756 19	728 32
2	1	4	8	7	7	....	....	....	.....	11	24	....	1	146	153	182	4577 68	4622 57	4994 37
....	....	....	..	..	....	....	....	....	.....	....	3	....	1	34	30	33	514 56	433 90	403 40
....	....	....	..	..	....	....	....	....	.....	....	5	....	....	29	31	35	429 18	437 71	444 01
....	....	1	3	3	3	1	....	....	.....	3	10	....	....	50	54	65	1475 40	1379 22	1427 09
....	....	....	..	..	....	....	....	....	.....	3	7	....	....	39	40	45	585 99	561 39	585 55
....	1	....	..	..	....	....	....	....	.....	3	12	....	....	59	60	66	1123 71	1013 84	990 41
1	1	....	..	..	....	....	....	....	.....	2	10	....	..	59	59	65	1240 67	1151 95	1121 85
....	....	....	..	..	....	....	....	....	.....	12	11	....	....	48	60	60	874 14	897 74	900 26
1	....	....	..	..	....	....	....	1	.....	..	11	....	....	34	32	45	618 09	562 85	658 88
....	....	....	3	3	2	8	8	11	.....	....	6	....	..	93	93	103	3428 12	3466 22	3744 21
....	....	....	..	..	....	....	....	....	.....	....	5	....	1	37	39	43	636 74	685 42	478 77
....	....	....	..	..	....	....	....	....	.....	1	14	....	....	64	59	72	1333 64	1174 94	994 03
....	....	....	..	..	....	....	....	....	.....	....	2	....	....	20	20	22	225 57	236 23	299 99
....	....	....	..	..	....	....	....	....	.....	1	2	....	....	20	23	24	300 41	342 61	363 50
....	....	1	..	..	....	....	....	....	.....	....	10	....	....	49	48	54	912 15	860 91	787 73
....	....	....	..	..	....	....	....	....	.....	....	4	....	....	16	21	26	209 58	328 11	397 88
....	....	....	..	..	....	....	....	....	.....	....	13	....	2	89	85	100	2097 80	2063 19	1890 53
1	10	1	2	2	2	....	....	....	.....	....	9	....	....	97	98	86	2929 61	2655 29	2350 90
1	....	....	..	..	....	....	....	....	.....	....	13	....	....	83	77	93	1543 24	1424 01	1585 03
....	....	....	..	..	....	....	....	....	.....	3	6	....	....	40	42	45	679 18	616 19	619 19

Districts under the Scott Act for the first two months of the year.

SCHEDULE A.—Comparative Statement shewing the number of

LICENSE DISTRICT.	Tavern Licenses Issued.								Tavern Licenses Extended.			Shop Licenses Issued.		
	Yearly Licenses.				Six Months' Licenses.									
	Ordinary.			Beer and Wine.	Ordinary.			Beer and Wine.						
	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
Middlesex, West	34	33	35	....	...	....	....	.....	....	....	....	4	4	4
Monck	16	15	17	1	...	....	....	.....	....	....	....	2	2	2
Muskoka and Parry Sound	38	44	45	.....	1	1	1	...	....	...	1	1	4	4
Nipissing	3	3	10	1	....	....	....	.....	....	....	....	1	1	8
Norfolk	51	51	55	.....	....	....	....	.....	....	....	....	7	6	6
Northumberland, East	25	25	23	1	....	2	1	.....	....	1	....	5	6	6
Northumberland, West	28	27	26	.....	1	1	1	.....	....	....	2	5	5	5
Ontario, North	34	38	38	....	....	....	....	.....	....	....	....	6	8	9
Ontario, South	27	27	27	1	....	....	....	.....	....	....	....	3	3	3
Ottawa	73	75	75	.....	1	....	1	...	....	....	....	71	72	71
Oxford, North	37	36	38	.....	....	....	....	....	....	....	....	6	7	7
Oxford, South	37	38	35	.....	....	....	....	.....	....	....	....	6	7	6
Peel	38	38	36	.....	1	1	1	.....	2	....	1	6	5	5
Perth, North	66	64	63	1	....	....	....	.....	....	....	1	11	13	13
Perth, South	44	46	42	....	....	....	....	.....	1	....	1	7	6	6
Peterborough, East	19	19	18	1	....	1	1	.....	....	....	....	3	3	4
Peterborough, West	23	27	27	.....	....	....	....	.....	....	....	....	10	9	10
Prescott	29	29	36	.....	....	....	....	.....	....	....	....	5	4	5
Prince Edward	23	24	24	.....	....	1	1	.....	....	....	....	2	2	3
Renfrew, North	18	22	20	1	....	....	....	.....	....	....	....	9	11	8
Renfrew, South	18	20	24	2	....	....	....	.....	....	....	....	7	10	9
Russell	27	26	28	.....	....	....	....	.....	....	....	....	....	....	....
Simcoe, East	34	36	36	.....	....	....	....	.....	....	1	....	5	3	3
Simcoe, South	31	36	36	.....	....	....	....	.....	....	....	....	4	6	5
Simcoe, West	54	53	50	..	1	.	....	.....	1	....	....	9	10	11
Stormont	16	14	14	.....	....	....	....	.....	..	....	....	....	2	2
Thunder Bay	13	9	11	1	....	2	....	.....	..	....	....	3	3	4
Toronto	195	204	209	1	....	1	1	....	..	1	2	98	94	95
Victoria, North, and Haliburton	31	24	26	.....	....	....	....	.....	....	....	....	2	1	1
Victoria, South	29	35	35	1	...	1	1	.....	....	2	....	4	4	3
Waterloo, North	46	45	46	....	....	..	....	.....	....	....	....	8	8	9
Waterloo, South	43	42	42	.....	....	....	....	.....	1	....	....	7	7	7
Welland	89	84	78	.....	7	5	4	..	....	....	2	25	29	19
Wellington, Centre	35	36	37	.....	....	....	....	.....	....	....	....	7	6	6
Wellington, South	37	40	39	....	...	....	....	.....	....	....	...	10	10	8
Wellington, West	51	53	58	.....	....	....	....	.....	..	....	....	9	10	10
Wentworth, North	35	32	25	9	....	....	....	.....	....	....	....	4	4	4
Wentworth, South	28	24	21	.....	....	....	....	.....	...	1	1	2	2	2
York, East	41	39	44	.....	....	...	...	....	....	1	....	5	5	6
York, North	37	39	41	.....	....	....	....	.....	....	....	....	6	7	8
York, West	36	39	43	.....	....	.	....	.....	....	....	....	4	4	7
Totals	3199	3227	3277	34	29	29	27	3	13*	32*	41*	757	760	764

* These do not include extensions which were † and 1 extended.

Tavern, Shop, Wholesale, Six Months' and Vessel Licenses, etc.—*Continued.*

Shop Licenses Extended.			Wholesale Licenses Issued.			Vessel Licenses Issued.				Licenses Transferred and Removed.				Total.			Proportion of License Duties, Fees for Transfers and Removals and Fines, received by the Province.		
						Ordinary.			Beer and Wine.	Transfers.		Removals.							
1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
																	$ c.	$ c.	$ c.
....	....	....	..	..	....	....	....	....	.....	3	6	....	....	38	40	45	634 20	650 16	685 65
..	....	....	..	..	..	....	....	....	.....	....	3	....	....	18	17	23	208 65	194 02	258 01
....	....	....	..	..	..	....	....	....	.....	....	7	....	....	40	49	58	1229 01	1531 25	1482 20
....	....	....	..	..	..	....	....	....	.....	....	3	....	....	4	4	22	218 00	218 00	1439 75
....	....	....	..	..	..	....	....	....	.....	....	14	....	....	58	57	75	1070 13	1066 67	1123 75
....	....	....	..	..	..	....	....	....	.....	....	6	....	....	30	34	37	434 98	481 03	426 71
....	....	....	..	..	..	....	....	....	.....	....	4	....	....	34	33	38	643 20	660 42	690 94
....	....	....	..	..	..	....	....	....	.....	....	4	....	1	40	46	52	564 02	745 19	790 55
....	....	....	..	..	..	....	....	....	.....	....	11	....	....	30	32	42	649 27	610 68	605 87
....	1	2	..	..	....	1	1	1	.....	1	2	2	7	146	152	165	4613 58	4712 39	4877 90
....	....	....	..	..	..	..	....	....	.....	2	9	....	....	43	45	54	891 59	842 40	906 61
....	....	....	..	..	..	....	....	....	.....	....	9	....	....	43	45	50	823 79	940 36	845 15
..	....	....	..	..	..	....	....	....	.....	....	8	....	....	47	44	51	781 38	759 15	714 86
....	....	....	..	..	..	....	....	....	.....	....	14	....	....	77	77	92	1705 89	1587 18	1575 91
....	..	....	..	..	..	....	....	....	.....	2	5	....	....	52	54	54	1044 54	1109 62	976 24
....	....	....	..	..	..	....	....	....	.....	....	4	....	1	22	23	29	267 19	298 22	296 62
....	....	....	..	..	..	1	1	1	.....	....	4	....	....	34	37	42	776 64	868 25	942 79
....	....	....	..	..	..	....	....	....	.....	....	....	....	....	34	33	41	547 36	508 07	684 69
....	....	....	..	..	..	1	3	1	.....	....	5	....	....	26	30	34	433 33	677 05	602 54
....	....	....	..	..	..	....	....	....	.....	....	....	....	....	27	33	29	557 11	739 75	653 67
....	....	....	..	..	..	....	....	....	.....	....	1	....	....	25	30	36	350 68	489 80	553 30
....	....	....	..	..	..	....	....	....	.....	....	3	....	....	27	26	31	385 56	401 53	556 94
....	...	2	1	1	1	....	....	....	.....	....	3	....	....	40	41	45	687 37	749 86	725 72
....	....	....	..	..	..	....	....	....	.....	....	6	1	....	35	42	47	562 88	704 02	646 88
....	....	....	..	..	..	1	1	1	.....	....	4	....	....	66	64	66	1356 83	1347 20	1256 20
....	....	....	..	..	..	....	....	....	.....	....	4	....	....	16	16	20	197 46	193 59	246 18
....	....	....	1	1	1	....	....	....	.....	....	3	....	....	17	15	20	354 16	277 90	333 96
....	....	....	19	18	15+	6	4	5	1	....	....	....	....	318	322	330	10275 53	10412 96	10603 73
....	....	....	..	..	..	....	....	....	.....	....	....	....	....	33	25	27	517 64	365 43	384 29
....	....	....	..	..	..	....	....	....	.....	3	6	....	....	33	45	46	591 27	691 64	670 99
....	....	....	..	..	..	....	....	....	.....	....	6	....	....	54	53	61	1159 99	1070 61	1160 87
....	....	....	..	..	..	....	....	....	.....	....	....	....	....	51	49	49	920 91	963 92	917 34
....	....	1	..	..	..	....	....	....	.....	....	19	....	....	121	118	123	2510 75	2574 92	2038 17
....	....	....	..	..	..	....	....	....	.....	....	8	....	....	42	42	51	727 19	728 04	730 52
....	....	....	..	..	..	....	....	....	.....	....	2	....	....	47	50	49	1217 59	1184 93	1153 51
....	....	....	..	..	..	....	....	....	.....	....	11	....	....	60	63	79	1104 89	1297 58	1401 96
....	....	....	..	..	..	....	....	....	.....	....	10	....	....	39	36	48	709 90	627 65	670 63
....	....	....	..	..	..	....	....	....	.....	....	6	....	....	30	27	30	473 99	417 78	327 25
....	....	....	..	..	..	....	....	....	.....	....	8	....	....	46	45	58	754 18	738 14	827 12
....	1	1	..	..	..	....	....	....	.....	1	10	1	....	43	49	60	658 09	787 42	917 15
....	....	....	..	..	..	....	....	....	.....	....	2	....	....	40	43	52	584 22	686 97	863 59
6*	15*	13*	42	40	34†	22	22	23	1	65	522	4	20	4068	4195	4760	87198 19	89207 14	91948 75

afterwards converted into yearly licenses.

SCHDULE B.

COMPARATIVE STATEMENT, BY COUNTIES AND CITIES, shewing the Number of Tavern, Shop, Wholesale and Vessel Licenses issued in the several Counties, and certain Cities of the Province, for the license years 1871-2-3-4-5-6-7-8-9-80-81.

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Algoma (including Thunder Bay)	1871	9	6	.....	2	
	1872	15	8	.....	3	
	1873	24	15	.. ..	1	
	1874	30	14	... .	3	
	1875	36	15	....	3	
	1876	18	6			
	1877	19	5			
	1878	19	5			
	1879	21	8	1		
	1880	22	6	1		
	1881	29	9	1		
Brant	1871	103	27			
	1872	107	29			
	1873	108	28			
	1874	95	29			
	1875	73	22	2		
	1876	56	14	4		
	1877	.....	.....	7	.....	Dunkin Act in force.
	1878	53	11	5		
	1879	55	14	1		
	1880	57	14	1		
	1881	55	14	1		
Bruce	1871	93	18			
	1872	106	25			
	1873	110	20			
	1874	180	25			
	1875	119	22			
	1876	88	13	3		
	1877	83	12	2		
	1878	83	9	2	.....	Dunkin Act in force for 10 months.
	1879	93	12			
	1880	98	14			
	1881	105	15			
Carleton (not including Ottawa)	1871	63				
	1872	69	7			
	1873	63				
	1874	89	5			
	1875	79	8			
	1876	44	1	2		
	1877	55	3			
	1878	43	3			
	1879	43	1			
	1880	42	3			
	1881	50	3			
Dufferin	1881	33	7	.....	.....	New Co. erected 24 Jan. '81.
Elgin	1871	85	24			
	1872	88	25			
	1873	112	26			
	1874	113	25			
	1875	110	24			
	1876	66	16	2		
	1877	66	10			
	1878	69	12			
	1879	72	16			
	1880	74	12			
	1881	74	13			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Essex	1871	104	15			
	1872	112	19			
	1873	122	22			
	1874	120	28	6		
	1875	101	25	6		
	1876	62	14	5	1	
	1877	69	18	1	1	
	1878	69	18	2	1	
	1879	71	18	3	1	
	1880	70	19	2	1	
	1881	74	21	2		
Frontenac (not including Kingston)	1871	55				
	1872	65				
	1873	72	1			
	1874	71	2			
	1875	57	29			
	1876	29	.....	1		
	1877	17	.....	.....	.....	Dunkin Act assumed to be in force till quashed, Dec. 28.
	1878	34				
	1879	36				
	1880	33	1			
	1881	33	1			
Grey	1871	112	13			
	1872	111	11			
	1873	118	13	.....	1	
	1874	115	20	.....	3	
	1875	114	16	.....	2	
	1876	77	11	5	2	
	1877	.....	.....	6	2	Dunkin Act in force.
	1878	72	7	4	1	do till Sept.
	1879	91	12	1	1	
	1880	88	17	1	2	
	1881	84	16	.....	1	Melancthon & Shelbourne attached to new Co. Duffer n
Haldimand	1871	85	15			
	1872	89	15			
	1873	95	16			
	1874	96	16			
	1875	83	13			
	1876	45	5			
	1877	49	4			
	1878	49	4			
	1879	50	5			
	1880	47	5			
	1881	51	5			
Haliburton	.....	.....	.....	.....	.....	See Victoria, *post.*

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Halton	1871	60	10			
	1872	60	10			
	1873	60	8			
	1874	61	4			
	1875	58	5			
	1876	39	2	1		
	1877	38	1			
	1878	38	1			
	1879	42	1			
	1880	41	1			
	1881	41	1			
Hastings	1871	103	23			
	1872	115	24			
	1873	118	24			
	1874	117	23	1		
	1875	100	21	2		
	1876	76	11	3	1	
	1877	82	14	3	1	
	1878	89	15	3	2	
	1879	94	15	3	1	
	1880	91	16	3		
	1881	90	15	3		
Huron	1871	130	35			
	1872	133	38			
	1873	134	40			
	1874	150	38			
	1875	164	37	2		
	1876	113	16	3		
	1877	124	16			
	1878	127	20			
	1879	134	21			
	1880	131	16			
	1881	128	15			
Kent	1871	112	42			
	1872	118	42			
	1873	129	37			
	1874	128	41	.....	1	
	1875	118	34	.....	1	
	1876	66	13	4	1	
	1877	67	15	.....	1	
	1878	65	13			
	1879	67	14			
	1880	67	13			
	1881	69	13	.....	1	
Lambton	1871	74	31			
	1872	82	33			
	1873	88	38			
	1874	89	44	1		
	1875	85	33			
	1876	65	28	1		
	1877	65	25			
	1878	70	27			
	1879	72	26			
	1880	71	25			
	1881	72	22			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Lanark.....	1871	58	20			
	1872	61	15			
	1873	63	16			
	1874	62	20	2		
	1875	62	14	1		
	1876	32	9	2		
	1877	32	9			
	1878	7	4	.....	.....	Dunkin Act in force, except in Perth.
	1879	33	6			
	1880	34	8			
	1881	36	6			
Leeds and Grenville....	1871	131	29	.....	1	
	1872	134	33			
	1873	141	29			
	1874	145	32	1		
	1875	136	23	1		
	1876	79	23	3		
	1877	101	25			
	1878	97	19			
	1879	97	18			
	1880	97	20	1		
	1881	89	18			
Lennox and Addington..	1871	45	7			
	1872	51	7			
	1873	46	7	.....	1	
	1874	52	7			
	1875	46	8	.....	1	
	1876	28	6	1		
	1877	.....	.....	1	....	Dunkin Act in force.
	1878	36	6			
	1879	37	5			
	1880	37	5			
	1881	41	5			
Lincoln	1871	91	25			
	1872	96	24			
	1873	118	27			
	1874	94	23			
	1875	103	37			
	1876	70	31			
	1877	70	25			
	1878	69	21			
	1879	72	16			
	1880	73	12			
	1881	69	14			
Middlesex (not including London).....	1871	178	30			
	1872	186	32			
	1873	186	40			
	1874	188	17	1		
	1875	174	33			
	1876	122	26	3		
	1877	139	23			
	1878	143	21			
	1879	141	19			
	1880	134	18			
	1881	138	18			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Muskoka & Parry Sound.	1871	18	1	....	1	
	1872					
	1873	3				
	1874	9				
	1875	23				
	1876	19				
	1877	22				
	1878	29				
	1879	38	1			
	1880	44	4			
	1881	45	4			
Nipissing.....	1877	.....	1			
	1878	2	1			
	1879	3	1			
	1880	3	1			
	1881	11	8			
Norfolk	1871	72	13			
	1872	73	10			
	1873	64	7			
	1874	73	6			
	1875	74	6			
	1876	51	4	2		
	1877	51	5	1		
	1878	55	5			
	1879	51	7			
	1880	51	6			
	1881	55	6			
Northumberland and Durham	1871	134	28	....	1	
	1872	137	36	.....	2	
	1873	132	37	.....	1	
	1874	135	35	2	1	
	1875	121	32	2	1	
	1876	102	27	4	1	
	1877	103	25	2	1	
	1878	89	21	2	2	Dunkin Act in force for 10 months, except in Port Hope and Cobourg.
	1879	98	21	.....	1	
	1880	100	22	....	1	
	1881	100	23	.....	1	
Ontario	1871	103	25			
	1872	93	27			
	1873	100	28			
	1874	86	35			
	1875	87	23			
	1876	60	10			
	1877	58	9			
	1878	55	8	2	....	Dunkin Act in force for 10 months.
	1879	61	9			
	1880	65	11			
	1881	66	12			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Oxford	1871	108	38			
	1872	106	28			
	1873	106	29			
	1874	104	29			
	1875	102	25			
	1876	73	9	4		
	1877	70	10	1		
	1878	71	10			
	1879	74	12			
	1880	74	14			
	1881	73	13			
Peel	1871	89	26			
	1872	89	25			
	1873	89	17			
	1874	91	15			
	1875	86	15			
	1876	49	10			
	1877	57	9			
	1878	60	8			
	1879	57	7			
	1880	62	7			
	1881	56	7			
Perth	1871	137	23			
	1872	141	26			
	1873	133	34			
	1874	145	33			
	1875	135	25			
	1876	101	13	3		
	1877	105	17			
	1878	105	17			
	1879	110	18			
	1880	110	19			
	1881	106	19			
Peterborough	1871	82	12			
	1872	78	16	.....	1	
	1873	91	16			
	1874	98	16			
	1875	72	16			
	1876	40	11	2	1	
	1877	43	11	.....	1	
	1878	35	11	.....	1	Dunkin Act in force in part
	1879	42	13	.....	1	of West Riding for 10 mo's.
	1880	46	12	.....	1	
	1881	46	14	.....	1	
Prescott and Russell	1871	44	6			
	1872	45	7			
	1873	53	12			
	1874	63	10			
	1875	58	11	1		
	1876	52				
	1877	46	5			
	1878	49	5			
	1879	41	5			
	1880	42	4			
	1881	50	5			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Prince Edward	1871	22	4		2	
	1872	21	4			
	1873	23	4			
	1874	22	3		3	
	1875	23	3		1	
	1876			1	1	Dunkin Act in force.
	1877					"
	1878					"
	1879	23	2		1	
	1880	24	2		3	
	1881	24	3		1	
Renfrew	1871	98	32		1	
	1872	96	33		1	
	1873	101	38		1	
	1874	100	35		1	
	1875	102	30	1	1	
	1876	51	20		1	
	1877	42	17			
	1878	31	15			
	1879	36	16			
	1880	42	21			
	1881	47	17			
Simcoe	1871	173	45			
	1872	207	52			
	1873	225	56			
	1874	223	42			
	1875	196	35	2	2	
	1876	135	24	2	2	
	1877	137	24	1	2	
	1878	149	21	1	1	
	1879	142	20	1	1	
	1880	155	23	1	1	
	1881	144	23	1	1	Mono and Mulmur attached to new County of Dufferin.
Stormont, Dundas and Glengarry	1871	99	36			
	1872	100	33			
	1873	106	32			
	1874	122	31			
	1875	80	28			
	1876	82	22			
	1877	87	17			
	1878	94	17			
	1879	91	16			
	1880	91	18			
	1881	96	18			
Victoria	1871	76	12			
	1872	73	10			
	1873	80	14		4	
	1874	78	13	1		
	1875	70	9		1	
	1876	55	5	1		Including Haliburton.
	1877	56	5			
	1878	56	6			
	1879	60	6			
	1880	59	5			
	1881	62	4			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

COUNTY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Waterloo	1871	147	30			
	1872	150	31			
	1873	143	33			
	1874	135	21	3		
	1875	136	20	13		
	1876	86	19	10		
	1877	84	17			
	1878	87	17			
	1879	89	15			
	1880	87	15			
	1881	88	16			
Welland	1871	129	22			
	1872	135	22			
	1873	144	27			
	1874	145	28	3		
	1875	151	23			
	1876	73	19			
	1877	80	19			
	1878	89	21			
	1879	92	25			
	1880	87	29			
	1881	81	19			
Wellington	1871	186	57			
	1872	201	57			
	1873	201	56			
	1874	183	52			
	1875	182	41	3		
	1876	138	29	3		
	1877	130	28	3		
	1878	134	29			
	1879	138	29			
	1880	145	30			
	1881	134	24	.....	.....	Orangeville, Amaranth and East Garafraxa attached to new C'nty of Dufferin.
Wentworth (not including Hamilton)	1871	100	22			
	1872	109	22			
	1873	109	25			
	1874	110	32	4		
	1875	107	19	2		
	1876	61	11	2		
	1877	56	10			
	1878	47	6			
	1879	63	6			
	1880	56	6			
	1881	55	6			
York (not including Toronto)	1871	164	44			
	1872	165	20			
	1873	174	22			
	1874	148	39			
	1875	164	35			
	1876	108	46	1		
	1877	97	15			
	1878	.....	.....	.....	.....	Dunkin Act in force.
	1879	114	15	.....	.....	" one month (May).
	1880	117	16			
	1881	128	21			

SCHEDULE B.—Comparative Statement, etc.—*Continued.*

CITY.	YEAR.	Tavern Licenses.	Shop Licenses.	Wholesale Licenses.	Vessel Licenses.	Remarks.
Toronto	1871	241	100	.....	3	
	1872	242	122	.....	3	
	1873	282	172	.....	6	
	1874	309	184	21	16	
	1875	299	128	28	9	
	1876	215	100	39	9	
	1877	182	100	26	6	
	1878	181	92	20	10	
	1879	195	98	19	6	
	1880	204	94	18	4	
	1881	210	95	15	6	
Hamilton	1871	112	81	.....	9	
	1872	118	86	.....	10	
	1873	120	103	.....	1	
	1874	127	93	.....	3	
	1875	110	72			
	1876	68	61	11	1	
	1877	68	55	7	2	
	1878	68	64	7	2	
	1879	68	61	8		
	1880	74	57	7		
	1881	89	55	7		
Ottawa	1871	89	63			
	1872	99	77			
	1873	125	87			
	1874	120	77	6		
	1875	114	148	7		
	1876	75	77	7	1	
	1877	75	80	2	1	
	1878	73	77	.....	1	
	1879	73	71	.....	1	
	1880	75	72	.....	1	
	1881	75	77	.....	1	
London	1871	87	36			
	1872	83	31			
	1873	100	40			
	1874	75	40	3		
	1875	75	74	2		
	1876	57	34	5		
	1877	58	35	1		
	1878	58	37	1		
	1879	57	36	2		
	1880	45	27	2		
	1881	45	24	2		
Kingston	1871	98	25			
	1872	101	27			
	1873	98	26	.....	1	
	1874	97	25	.....	1	
	1875	75	20	3	1	
	1876	53	23	6	5	
	1877	61	21	3	8	
	1878	61	21	3	8	
	1879	62	20	3	8	
	1880	62	20	3	8	
	1881	64	20	2	11	

SCHEDULE B.—*Concluded.*

RECAPITULATION, shewing the total number of Licenses issued in the several Counties in the Province, including the Cities, during the license years 1871-2-3-4-5-6-7-8-9-80-81.

Years.	Tavern.	Shop.	Wholesale.	Vessel.	Total.
1871	4299	1151	....	19	5469
1872	4460	1199	.....	20	5679
1873	4709	1322	.....	17	6048
1874	4793	1307	52	33	6185
1875	4459	1257	78	24	5818
1876	2977	787	147	27	3938
1877	2845	739	65	27	3676
1878	2910	724	52	29	3715
1879	3199	757	42	22	4020
1880	3227	760	40	22	4049
1881	3311	764	34	24	4133

The Six Months' Licenses and the Licenses *extended* do not appear in the above Schedule or Recapitulation, and as a consequence the total number of Licenses issued, according to the Statement, does not correspond with the total number as shewn in Schedules A and C. Beer and Wine Licenses are included with the ordinary licenses under the head of Tavern Licenses. An *extended* License is good for a period not exceeding three months. It is not in the nature of a new License, but simply a permission, granted by the Board of Commissioners to the holder of a License expiring in April, to continue his business under the old License for the specified period, that he may be enabled to dispose of his stock on hand and quit the business without loss. A Six Months' License runs from the first day of May to the thirty-first day of October, and is not valid after the latter date. They are granted in localities which are largely resorted to in summer by visitors, where the Boards of Commissioners are of opinion that increased tavern accommodation for the summer months is necessary.

SCHEDULE C.

COMPARATIVE STATEMENT, BY MUNICIPALITIES, shewing the number of Licenses, whether Ordinary or Beer and Wine, issued, and the number Extended, Transferred or Removed in each Municipality, the gross sums deposited to the credit of the License Fund Accounts therefor, and for Fines imposed in each Municipality, and the Revenue received by the Treasurer of each Municipality, during the license years 1879-80, 1880-1 and 1881-2 respectively.

License District.	MUNICIPALITY.	Tavern. Ordinary. 1879-80.	Tavern. Ordinary. 1880-1.	Tavern. Ordinary. 1881-2.	Tavern. Beer and Wine. 1881-2.	Shop. 1879-80.	Shop. 1880-1.	Shop. 1881-2.	Wholesale. 1879-80.	Wholesale. 1880-1.	Wholesale. 1881-2.	Extended Tavern. 1879-80.	Extended Tavern. 1880-1.	Extended Tavern. 1881-2.	Extended Shop. 1879-80.	Extended Shop. 1880-1.	Extended Shop. 1881-2.	Six Months. 1879-80.	Six Months. 1880-1.	Six Months. 1881-2.
ADDINGTON.	Camden	13	13	13	.....	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Sheffield	6	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newburgh	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Loughborough	6	5	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Hinchinbrooke	3	2	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Portland	5	4	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Oso	3	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Barrie	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Kaladar and Anglesea	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Palmerston and North and South Canonto	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Bedford	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Denbigh, Abinger, etc.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Olden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Kennebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ALGOMA.	Sault Ste. Marie	1	1	2	.....	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Howland	1	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Assiginack	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Gordon	1	2	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Carnarvon	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Tehkummah	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	St. Joseph	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Unorganized Territory	3	5	6	.....	1	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
ADDINGTON.	Camden	2	3	.....	1	14	16	19	900 00	950 00	935 00	419 90	480 80	468 11	
	Sheffield	.....	.....	.....	.....	6	6	6	400 00	380 00	360 00	186 63	192 32	180 24	
	Newburgh	.....	.....	.....	.....	2	2	2	160 00	140 00	120 00	74 65	70 86	60 08	
	Loughborough	.....	.....	.....	.....	6	5	5	360 00	375 00	275 00	111 99	190 18	137 68	
	Hinchinbrooke	.....	.....	.....	.....	4	3	4	240 00	180 00	300 00	83 99	91 10	150 20	
	Portland	1	.....	.....	.....	5	5	5	360 00	245 00	340 00	111 98	124 00	170 23	
	Oso	.....	.....	.....	.....	3	2	2	200 00	120 00	120 00	93 33	60 73	60 08	
	Barrie	.....	.....	.....	.....	1	1	1	60 00	100 00	60 00	27 99	70 36	30 04	
	Kaladar and Anglesea	.....	.....	.....	.....	2	2	2	160 00	120 00	120 00	74 65	60 73	60 08	
	Palmerston and North and South Canonto	.....	.....	.....	.....	1	1	1	60 00	60 00	120 00	28 00	30 36	80 05	
	Bedford	.....	.....	.....	.....	1	1	1	80 00	60 00	100 00	37 33	30 36	50 06	
	Denbigh, Abinger, etc.	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	28 00	.....	.....	
	Olden	.....	.....	.....	.....	.....	.....	.....	60 00	20 00	.....	27 99	10 13	.....	
	Kennebec	.....	.....	.....	.....	.....	.....	.....	20 00	20 00	.....	9 33	10 13	.....	
ALGOMA.	Sault Ste Marie	.....	1	.....	.....	4	2	4	550 00	275 00	405 00	430 72	212 68	251 93	
	Howland	.....	1	.....	.....	1	3	4	60 00	360 00	205 00	30 18	266 52	107 40	
	Assiginack	.....	2	.....	.....	2	2	4	130 00	140 00	170 00	70 36	77 68	98 60	
	Gordon	.....	.....	.....	.....	2	2	2	125 00	130 00	120 00	65 36	67 68	62 87	
	Carnarvon	.....	.....	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	31 44	
	Tehkummah	.....	.....	.....	.....	.....	.....	1	.....	.....	80 00	.....	.....	41 92	
	St. Joseph	.....	.....	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	31 44	
	Unorganized Territory	.....	3	.....	.....	4	7	13	240 00	460 00	675 00	.....	.....	.....	Payable to Province, less proportion of Expenses.

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.				Wholesale.				Extended Tavern.				Extended Shop.				Six Months.			
		Ordinary.			Beer and Wine.																				
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.	
NORTH BRANT.	Paris	7	8	7	...	2	2	2		....	....	....		....	....	....		....	....	....		....	....	....	
	South Dumfries	5	5	5	...	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Brantford, Tnship, Northerly portion	3	5	4	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Onondago	3	3	3	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
SOUTH BRANT.	Brantford, City	21	21	21	...	12	12	12		1	1	1		....	2	1		....	....	....		....	....	....	
	Brantford, Tnship, Southerly portion	5	5	6	...	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Oakland	3	3	3	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Burford	8	7	6	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
BROCKVILLE & SOUTH LEEDS.	Brockville	21	21	15		4	5	5		....	1	....		....	....	5		....	....	....		....	....	....	
	Camaroque	7	8	7		2	2	2		....	....	....		....	....	....		....	....	....		....	....	....	
	Newboro	2	3	3		2	2	2		....	....	....		....	....	....		....	....	....		....	....	....	
	Rear of Yonge and Escott	6	6	6		....	1	1		....	....	....		....	....	....		....	....	....		....	....	....	
	South Crosby	3	2	2		1	1	1		....	....	....		....	....	....		....	....	....		....	....	....	
	South Crosby	3	3	4		....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Rear of Leeds and Lansdowne	2	3	4		....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Elizabethtown	4	4	4		1	1	1		....	....	....		....	....	....		....	....	....		....	....	....	
	Front of Yonge	8	7	8		....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Front of Leeds and Lansdowne	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Front of Escott	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	

SCHEDULE C. *Continued.*

License District.	Municipality.	Licenses Transferred and Removed. — Transfers. 1880-1.	Transfers. 1881-2.	Removals. 1880-1.	Removals. 1881-2.	Total. 1879-80.	Total. 1880-1.	Total. 1881-2.	Amounts received for Licenses, Transfers, Removals and Fines in each Municipality. 1879-80.	1880-1.	1881-2.	Amounts paid to Municipalities. 1879-80.	1880-1.	1881-2.	Remarks.
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH BRANT.	Paris		1			9	10	10	1020 00	1080 00	1025 00	604 05	645 78	616 30	
	South Dumfries			1		5	6	5	340 00	305 00	300 00	158 68	143 50	143 80	
	Brantford, T'nship, Northerly portion		1			3	5	5	210 00	300 00	305 00	98 02	141 14	146 20	
	Onondago					3	3	3	200 00	180 00	180 00	93 33	84 70	86 29	
SOUTH BRANT.	Brantford, City		4			34	36	39	4190 00	4115 00	4192 50	2455 24	2457 17	2406 77	
	Brantford, T'nship, Southerly portion		1			5	5	7	320 00	300 00	365 00	171 56	164 11	190 73	
	Oakland		1			3	3	4	210 00	200 00	205 00	112 59	109 40	107 12	
	Burford					8	7	6	480 00	480 00	410 00	257 36	262 58	214 24	
BROCKVILLE & SOUTH LEEDS.	Brockville		2			25	27	27	3125 00	3425 00	3666 25	2207 31	2421 40	2766 04	
	Gananoque					9	10	9	1230 00	1340 00	1270 00	973 05	1072 98	1004 40	
	Newboro'					4	5	5	320 00	325 00	345 00	200 70	191 48	201 75	
	Bastard and Burgess					6	7	7	360 00	420 00	420 00	194 80	233 08	231 97	
	Rear of Yonge and Escott					3	2	2	240 00	120 00	120 00	108 23	66 56	66 29	
	North Crosby					4	4	5	240 00	240 00	320 00	129 87	133 17	176 75	
	South Crosby					2	3	4	120 00	180 00	240 00	64 93	99 88	132 56	
	Rear of Leeds and Lansdowne														
	Elizabethtown		2			5	5	5	320 00	300 00	300 00	173 16	166 48	165 70	
	Front of Yonge					8	7	10	580 00	440 00	510 00	313 85	244 18	281 68	
	Front of Leeds and Lansdowne														
	Front of Escott								40 00	20 00	60 00	21 65		2 41	Dunkin Act in force 1879-80-1-2.
									60 00	85 00	85 00	32 47	39 11	46 75	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.				Wholesale.				Extended Tavern.				Extended Shop.				Six Months.			
		Ordinary.			Beer and Wine.																				
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-81.	1881-2.		1879-80.	1880-1.	1881-2.	
NORTH BRUCE.	Wiarton	3	3	3			1	1																	
	Amabel	3	2	2																					
	Albemarle	1	1	1																					
	Arran	6	7	5																					
	Bruce	3	3	3																					
	Elderslie	1	1	1																					
	Port Elgin	6	5	4		1	1	1							1										
	Paisley	4	4	4		1	1	1											1						
	Southampton	4	4	4																1					
	Saugeen	1	1	1																					
	Tiverton	3	3	3																					
	Chesley	3	3	3			2	2																	
	Tara, Village							1																	
	Eastnor, Township			3																					
SOUTH BRUCE.	Kincardine, Town	7	7	8		2	2	2																	
	Carrick	11	11	11		1	1	1																	
	Walkerton	7	7	7		2	2	2																	
	Kinloss	7	7	8																					
	Greenock	7	7	7																					
	Culross	2	2	2																					
	Brant	8	9	9																					
	Kincardine, Township	2	2	2																					
	Huron	1	5	5		1	1	1																	
	Lucknow	3	3	5												1								1	
	Teeswater	4	4	4		1	2	1																	
CARDWELL.	Adjala	7	10	11		1	1	1																	
	Caledon	9	12	9		1	2	1																	
	Tecumseth	9	11	11		1	3	3																	
	Bolton	3	3	3																					
	Albion	7	8	8				1																	

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals, and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH BRUCE.	Wiarton	.....	.....	.....	.....	.....	4	4	.....	260 00	240 00	.....	140 18	131 76	
	Amabel	.....	.....	.....	.....	3	2	2	280 00	120 00	139 60	176 51	64 70	76 30	
	Albemarle	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	31 80	32 35	32 94	
	Arran	.....	.....	.....	.....	6	7	5	700 00	440 00	300 00	483 72	237 21	164 70	
	Bruce	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	95 33	97 05	98 82	
	Elderslie	.....	.....	.....	.....	6	1	1	600 00	60 00	60 00	430 74	32 35	32 94	
	Port Elgin	.....	.....	.....	.....	6	5	5	700 00	620 00	620 00	530 71	472 52	475 70	
	Paisley	.....	1	.....	.....	5	6	6	660 00	585 00	585 00	500 11	421 39	420 40	
	Southampton	.....	.....	.....	.....	5	5	5	290 00	270 00	270 00	153 62	145 58	148 23	
	Saugeen	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	31 80	32 35	32 94	
	Tiverton	.....	.....	.....	.....	3	3	3	255 00	245 00	195 00	170 33	152 83	113 82	
	Chesley	.....	.....	.....	.....	.....	5	5	.....	620 00	600 00	.....	472 52	464 70	
	Tara, Village	.....	.....	.....	.....	.....	.....	4	.....	.....	420 00	.....	.....	293 73	
	Eastnor, Township	.....	.....	.....	.....	.....	.....	4	.....	40 00	210 00	.....	21 57	115 30	
SOUTH BRUCE.	Kincardine, Town	1	5	.....	.....	9	10	15	1080 00	1135 00	1165 00	717 04	750 15	780 95	
	Carrick	.....	1	.....	.....	12	12	13	720 00	720 00	725 00	393 36	395 90	403 09	
	Walkerton	.....	2	.....	.....	9	9	11	1190 00	1130 00	1120 00	854 28	778 89	778 13	
	Kinloss	.....	.....	.....	.....	4	4	4	240 00	240 00	260 00	131 12	131 98	144 57	
	Greenock	.....	1	.....	.....	7	7	9	420 00	420 00	525 00	229 46	230 96	291 90	
	Culross	.....	.....	.....	.....	2	2	2	120 00	120 00	120 00	65 55	65 98	66 72	
	Brant	.....	1	.....	.....	8	9	10	500 00	590 00	545 00	273 16	324 44	303 02	
	Kincardine, Township	.....	1	.....	.....	1	2	3	80 00	140 00	225 00	43 71	76 98	125 10	
	Huron	.....	2	.....	.....	4	6	8	300 00	380 00	370 00	163 90	208 95	205 72	
	Lucknow	.....	1	.....	.....	6	6	10	890 00	800 00	870 00	676 78	575 62	648 01	
	Teeswater	.....	.....	.....	.....	5	5	5	430 00	400 00	400 00	284 82	264 98	266 80	
CARDWELL.	Adjala	.....	2	.....	.....	8	11	14	582 00	736 21	750 00	295 24	395 64	407 78	
	Caledon	1	1	.....	.....	10	15	11	740 00	1025 00	705 00	424 66	615 60	383 32	
	Tecumseth	1	2	.....	.....	10	15	16	634 00	945 00	910 00	321 63	507 80	494 78	
	Bolton	.....	.....	.....	.....	3	3	3	345 00	300 00	290 00	256 32	202 85	198 73	
	Albion	1	2	.....	.....	7	9	11	440 00	505 00	570 00	223 21	271 30	309 92	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. — Ordinary.				Tavern. — Beer and Wine.		Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		1879-80.	1880-1.	1881-2.	1882-3.	1881-2.	1882-3.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
CARLETON.	Huntley	2	2	2	2																	
	North Gower	5	5	5	5																	
	Marlborough	1	1	1	1																	
	Goulburn	3	2	2	2																	
	Richmond	2	2	2	2			1	2	2												
	March	1	1	1	1																	
	Nepean	14	16	23	23				1	1												
CORNWALL.	Cornwall, Township	14	13	15				2	2	2					1							
	Cornwall, Town	10	9	9				3	3	3					1							
DUFFERIN.	Orangeville	8	8	8				3	4	4												
	Mulmur	4	4	6																		
	Mono	3	5	3		1																
	Melancthon	4	4	4																		
	Garafraxa, East	3	4	3																		
	Shelburne	3	3	3				2	2	3												
	Amaranth	4	4	5																		
DUNDAS.	Iroquois	4	4	4				1	1	1												
	Matilda		1	1																		
	Morrisburgh	5	6	6				3	3	3											1	
	Winchester	7	6	6																		
	Williamsburgh	5	5	5																		
	Mountain	5	4	5																		

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
CARLETON.	Huntley					2	2	2	120 00	120 00	120 00	54 13	57 64	56 66	
	North Gower					5	5	5	300 00	300 00	300 00	135 81	144 09	141 67	
	Marlborough					1	1	1	60 00	60 00	60 00	27 06	28 83	28 34	
	Goulburn					3	2	2	180 00	120 00	120 00	81 21	57 64	56 67	
	Richmond					3	4	4	200 00	240 00	240 00	90 22	115 28	113 33	
	March					1	1	1	60 00	60 00	60 00	27 06	28 82	28 34	
	Nepean			1		14	17	25	840 00	1020 00	1445 00	378 91	489 89	682 35	
CORNWALL.	Cornwall, Township		2			16	16	19	1170 00	1146 25	1295 00	684 91	667 29	760 31	
	Cornwall, Town	1	1			13	14	13	2920 00	2535 00	2485 00	2115 91	2024 80	1994 88	
DUFFERIN.	Orangeville	1	3			11	13	15	1690 00	1585 00	1635 00	1247 67	1198 35	1156 16	
	Mulmur					4	4	6	260 00	300 00	360 00	134 81	160 93	193 44	
	Mono					3	5	5	240 00	300 00	300 00	123 43	160 93	126 28	
	Melancthon		1			4	4	5	240 00	240 00	240 00	123 43	128 74	131 66	
	Garafraxa, East		2			3	3	5	180 00	240 00	240 00	123 43	128 74	131 66	
	Shelburne		1			5	5	7	300 00	320 00	440 00	154 29	171 65	232 12	
	Amaranth					4	4	5	240 00	260 00	300 00	123 43	139 41	161 20	
DUNDAS.	Iroquois					5	5	5	500 00	500 00	540 00	341 57	346 00	369 81	
	Matilda						1	1		100 00	100 00		69 20	69 97	
	Morrisburgh					8	9	9	950 00	1050 00	1050 00	696 52	722 77	779 47	
	Winchester					7	7	6	700 00	650 00	640 00	478 21	449 80	439 77	
	Williamsburgh					5	5	5	375 00	415 00	395 00	249 57	240 46	254 82	
	Mountain		1			5	4	6	300 00	240 00	365 00	141 57	116 80	152 33	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary.			Tavern. Beer and Wine.	Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		1879-80.	1880-81.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
EAST DURHAM.	Millbrook		5	5	2	1	1	2						1						
	Manvers	4	4	2																
	Cavan	8	3	5		1														
	Hope	1	3	3																
	Port Hope	14	14	14*	1	6	6	6											1	
WEST DURHAM.	Darlington	3	3	3																
	Cartwright	2	2	2		1	1	1												
	Bowmanville	5	5	5		2	2	2												
	Newcastle	4	4	4		1	1	1										1		
	Clarke	4	5	4																
ELGIN.	Dunwich	6	6	6		1	1	1												
	Bayham	8	8	8		1	1	1												
	Aldborough	7	7	7																
	Southwold	7	7	7																
	South Dorchester	1	1	1		1														
	Malahide	4	4	5																
	Yarmouth	10	10	10																
	Vienna	2	2	2		1	1	1												
	Aylmer	4	4	4		3	1	1												
	St. Thomas	16	18	18		8	7	9						1				1	1	
	Port Stanley	4	4	3		1	1	1						1				1		1
	Springfield	3	3	3																

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
EAST DURHAM.	Millbrook	....	....	....	....	....	6	8	....	520 00	600 00	....	190 30	390 19	
	Manvers	....	....	....	....	4	4	4	264 65	240 00	230 00	85 71	70 99	146 99	
	Cavan	....	....	....	....	9	3	5	720 00	225 00	300 00	417 15	69 91	161 65	
	Hope	....	1	....	....	1	3	4	120 00	300 00	325 00	68 57	169 74	230 47	
	Port Hope	....	1	....	2	20	20	24	3020 00	3000 00	3055 00	2161 91	2319 70	2291 85	
WEST DURHAM.	Darlington	....	1	....	....	3	3	4	340 00	240 00	245 00	218 97	144 47	144 99	
	Cartwright	....	5	....	....	3	3	8	220 00	180 00	290 00	98 96	84 47	133 22	
	Bowmanville	....	3	....	....	7	7	10	1105 00	1105 00	1040 00	752 88	765 56	729 12	
	Newcastle	....	....	....	....	6	5	5	482 50	438 75	400 00	276 18	261 05	237 80	
	Clarke	....	5	....	....	4	5	9	340 00	399 00	325 00	185 95	227 12	181 73	
ELGIN.	Dunwich	....	....	....	1	7	7	8	570 00	570 00	515 00	372 90	375 66	344 71	
	Bayham	....	2	....	....	9	9	11	560 00	540 00	550 00	330 05	321 36	329 63	
	Aldborough	....	2	....	....	7	7	9	455 00	455 00	465 00	282 55	284 95	292 71	
	Southwold	....	1	....	....	7	7	8	420 00	420 00	445 00	247 55	249 95	266 70	
	South Dorchester	....	....	....	....	2	1	1	120 00	60 00	60 0	70 73	35 70	35 96	
	Malahide	....	2	....	....	4	4	7	240 00	260 00	310 00	141 45	154 73	185 79	
	Yarmouth	....	3	....	....	10	10	13	640 00	625 00	615 00	377 26	371 95	368 59	
	Vienna	....	....	....	....	3	3	3	180 00	190 00	180 00	106 09	117 12	107 88	
	Aylmer	....	1	....	....	7	5	6	560 00	400 00	425 00	387 55	278 53	302 79	
	St. Thomas	....	5	....	1	24	25	33	4820 00	5130 00	5580 00	4023 40	4267 65	4396 09	
	Port Stanley	....	....	....	....	6	6	6	495 00	460 00	427 50	359 51	318 29	313 32	
	Springfield	....	....	....	....	3	3	3	180 00	220 00	210 00	106 09	130 93	125 86	

SCHEDULE C.—Comparative Statement by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
NORTH ESSEX.	West Tilbury	6	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Maidstone	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Windsor	15	15	17	...	7	9	10	3	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Rochester	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Sandwich	11	10	10	....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	West Sandwich	4	4	4	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sandwich, Town	5	5	5	...	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
	Belle River	3	3	3	.....	2	2	2	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTH ESSEX.	Mersea	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Leamington	3	3	4	.....	.....	.....	1	...	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
	Amherstburgh	6	6	8	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Anderdon	3	3	2	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Malden	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Gosfield	4	4	4	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Kingsville	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Colchester	...	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Colchester, North	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	Colchester, South	...	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
FRONTENAC.	Kingston, Township	5	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Storrington	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pittsburgh	3	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wolfe Island	3	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Portsmouth	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Howe Island	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
GLENGARY.	Charlottenburgh	9	10	10	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lochiel	6	7	8	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lancaster	8	8	8	.....	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Kenyon	2	3	5	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed. Transfers. 1880-1.	Transfers. 1881-2.	Removals. 1880-1.	Removals. 1881-2.	Total. 1879-80.	Total. 1880-1.	Total. 1881-2.	Amounts received for Licenses, Transfers, Removals and Fines in each Municipality. 1879-80.	1880-1.	1881-2.	Amounts paid to Municipalities. 1879-80.	1880-1.	1881-2.	Remarks.
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH ESSEX.	West Tilbury					6	6	6	360 00	360 00	380 00	206 49	206 06	222 14	
	Maidstone					2	2	2	120 00	120 00	140 00	68 83	68 68	81 84	
	Windsor	1				25	27	29	3870 00	3985 00	4405 00	2876 58	2999 17	3360 15	
	Rochester					3	3	3	180 00	180 00	200 00	103 25	103 03	116 90	
	East Sandwich					13	11	11	780 00	660 00	685 00	447 23	377 72	400 44	
	West Sandwich					4	4	4	260 00	240 00	240 00	149 14	137 38	140 28	
	Sandwich, Town					8	8	9	885 00	870 00	907 50	590 79	587 72	614 61	
	Belle River					5	5	5	300 00	300 00	300 00	172 09	171 69	175 36	
SOUTH ESSEX.	Mersea		1			2	2	3	160 00	140 00	145 00	91 15	82 40	85 32	
	Leamington					4	4	5	210 00	230 00	320 00	106 83	121 70	176 76	
	Amherstburgh		2			10	10	14	1020 00	1600 00	1290 00	617 14	615 98	788 70	
	Anderdon					3	3	2	180 09	180 00	120 00	91 56	93 60	62 71	
	Malden					2	2	2	120 00	140 00	120 00	61 40	74 89	62 71	
	Gosfield		1			4	4	5	240 00	240 00	245 00	122 08	124 79	128 02	
	Kingsville					2	2	2	180 00	160 00	160 00	111 22	102 39	102 71	
	Colchester								160 00			81 41			Dunkin Act in force, 1879-80-1-2.
	Colchester, North									235 00	65 00		123 05	33 97	
	Colchester, South									40 00			25 00		
FRONTENAC.	Kingston, Township		1			5	5	6	370 00	300 00	325 00	107 37	97 06	105 59	
	Storrington					2	2	2	120 00	140 00	140 00	34 81	45 29	45 49	
	Pittsburgh					3	4	3	220 00	260 00	258 15	63 83	84 12	83 88	
	Wolfe Island					3	2	3	180 00	160 00	180 00	52 23	51 77	58 48	
	Portsmouth					3	3	3	180 00	270 00	180 00	52 23	87 37	58 48	
	Howe Island								20 00			5 80			
GLENGARRY.	Charlottenburgh					10	11	11	680 00	740 00	730 00	335 07	377 15	382 28	
	Lochiel					8	9	10	520 00	600 00	700 00	276 50	325 42	385 62	
	Lancaster					11	11	11	660 00	660 00	700 00	325 21	336 38	366 57	
	Kenyon					3	4	6	220 00	320 00	380 00	108 39	163 11	199 00	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.				Wholesale.				Extended Tavern.				Extended Shop.				Six Months.			
		Ordinary.		Beer and Wine.																					
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1881-2.
EAST GREY.	Artemesia	6	6	6			1	1																	
	Proton	5	6	6			1	1																	
	Holland	8	8	7		1	1	1								1									
	Collingwood, Township	7	6	6		1	1	1																	
	Euphrasia	1	1	1			1																		
	Osprey	4	4	5																					
NORTH GREY.	Owen Sound	9	9	10		3	3	4		1	1														
	Sullivan	3	3	3			1	1																	
	Meaford	6	6	6		1	2	2																	
	Derby	5	4	4																					
	Keppel	2	1	1																					
	Sydenham	2	2	2	1																				
	St. Vincent	1	1	1																					
SOUTH GREY.	Durham	4	4	4		1	2	1																	
	Bentinck	4	4	4		2	2	3																	
	Glenelg	4	4	4		1	2	2																	
	Normanby	10	9	9	1																				
	Egremont	3	3	3																					

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.				Remarks.
		Transfers.		Removals.												
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.		
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.		
EAST GREY.	Artemesia		1			6	6	7	660 00	600 00	605 00	437 69	428 97	496 72		
	Proton					5	7	7	455 00	440 00	440 00	253 88	230 97	225 08		
	Holland					9	9	8	540 00	560 00	521 00	254 19	293 97	266 53		
	Collingwood, Township		1			8	7	9	550 00	470 00	550 00	272 04	270 47	305 79		
	Euphrasia					1	2	1	60 00	140 00	90 00	28 26	73 51	46 05		
	Osprey		3			4	4	8	260 00	260 00	335 00	122 39	136 50	171 36		
NORTH GREY.	Owen Sound		2			13	13	16	1430 00	1490 00	1490 00	830 32	882 48	875 31		
	Sullivan		2			3	4	6	180 00	240 00	250 00	90 64	123 36	114 74		
	Meaford		4			7	8	12	790 00	900 00	920 00	492 18	588 92	562 91		
	Derby					5	4	4	300 00	260 00	280 00	151 09	133 65	128 49		
	Keppel					2	1	1	120 00	60 00	80 00	60 43	30 84	36 72		
	Sydenham		2			2	2	5	120 00	140 00	180 00	60 43	71 96	82 61		
	St. Vincent					1	1	1	60 00	60 00	60 00	30 22	30 84	27 54		
SOUTH GREY.	Durham		1			5	6	6	570 00	550 00	555 00	379 86	343 59	354 57		
	Bentinck				1	6	6	8	380 00	360 00	465 00	189 86	174 27	234 86		
	Glenelg		1			5	6	7	300 00	360 00	365 00	149 90	174 27	184 35		
	Normanby					10	9	15	620 00	540 00	655 00	309 79	261 31	330 83		
	Egremont		2			3	5	3	180 00	190 00	200 00	89 94	91 97	101 02		

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc. — *Continued.*

License District.	Municipality	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Beer and Wine.														
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
HALDIMAND.	Cayuga, Village	5	5	5		1	1	1												
	Caledonia	4	4	4		2	2	2												
	Oneida	3	3	3																
	Cayuga, North, Township	4	4	4																
	Dunn	4	4	5																
	Rainham	4	4	4																
	Walpole	13	12	12																
	Seneca	5	4	5																
HALTON.	Nelson	4	4	4											1	1	1			
	Nassagaweya	3	3	3																
	Esquesing	8	7	7																
	Burlington	4	4	4											1					
	Georgetown	4	5	5																
	Oakville	6	5	5		1	1	1												
	Milton	4	4	4																
	Acton	3	3	3																
	Trafalgar	6	6	6																
HAMILTON.	Hamilton, City	68	74	87	2	61	57	55	8	7 and 1 Ex.	7	6	1		2	1	4	1	1	2 B. & W.

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
HALDIMAND.	Cayuga Village	....	.....	.....	.....	6	6	6	480 00	570 00	480 00	318 98	362 39	316 78	
	Caledonia	.....	.....	.....	.....	6	6	6	720 00	850 00	810 00	558 98	613 16	605 98	
	Oneida	.....	.....	....	....	3	3	3	180 00	210 00	200 00	99 50	113 11	109 32	
	Cayuga, North, Township	....	....	....	....	4	4	4	240 00	240 00	240 00	132 66	129 27	131 20	
	Dunn	.....	.....	.....	...	4	4	5	240 00	240 00	300 00	132 66	129 27	163 98	
	Rainham	.....	.....	.....	.....	4	4	4	240 00	240 00	240 00	132 66	129 28	131 20	
	Walpole	.....	..	..	.....	13	12	12	820 00	720 00	720 00	453 24	387 80	393 56	
	Seneca	.....	.....	....	.....	5	4	5	400 00	320 00	400 00	265 83	209 28	263 98	
HALTON.	Nelson	.....	.....	....	.....	5	5	5	270 00	270 00	270 00	145 78	144 79	140 48	
	Nassagaweya	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	97 20	96 58	93 63	
	Esquesing	....	.....	.....	.....	8	7	7	580 00	540 00	490 00	350 00	322 06	288 47	
	Burlington	....	.....	.....	....	5	4	4	450 00	400 00	400 00	325 79	288 71	284 84	
	Georgetown	.....	1	.....	....	4	5	6	320 00	350 00	355 00	191 19	210 87	208 66	
	Oakville	.....	.....	.....	....	7	6	6	700 00	620 00	620 00	442 36	388 13	380 10	
	Milton	....	1	.....	.. ..	4	4	5	480 00	480 00	505 00	332 76	331 61	339 49	
	Acton	.....	...	.....	.....	3	3	3	245 00	255 00	225 00	152 99	171 52	138 63	
	Trafalgar	.....	...	.....	....	6	6	6	450 00	390 00	390 00	284 39	223 10	217 27	
HAMILTON.	Hamilton City	11	24	.....	1	146	153	182	21676 00	21902 50	23584 00	15730 35	15845 14	17288 74	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
EAST HASTINGS.	Tyendinaga	11	9	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hungerford	7	8	8	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Thurlow	11	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deseronto (formerly Mill Point)	4	3	4	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
NORTH HASTINGS.	Marmora and Lake	4	5	3	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Huntingdon	3	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Stirling	3	4	4	...	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...
	Madoc, Township	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Elzevir and Grimsthorpe	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tudor, Limerick, Wollaston, and Cashel	4	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monteagle and Herschel	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rawdon	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Madoc, Village	3	4	3	...	2	3	3	...	...	...	...	...	...	...	...	...	...	...	...
	Wicklow and Bangor	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
WEST HASTINGS.	Belleville	26	25	25	...	7	7	5	3	3	3	...	1	3	...	...	...	...	1	1
	Trenton	7	8	9	...	2	2	2	...	...	...	...	...	1	...	...	1	...	...	...
	Sidney	4	4	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals, and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
EAST HASTINGS.	Tyendinaga	.....	.....	.....	.....	11	9	7	700 00	580 00	440 00	346 34	264 91	197 44	
	Hungerford	.....	1	.....	.....	8	9	10	480 00	540 00	545 00	237 49	246 61	244 53	
	Thurlow	.....	2	.....	.....	11	8	10	660 00	500 00	508 00	326 55	228 37	227 93	
	Deseronto(formerly Mill P't)	.....	.....	.....	1	4	3	6	800 00	640 00	1005 00	678 74	522 70	836 87	
NORTH HASTINGS.	Marmora and Lake	.....	.....	.....	.....	5	6	4	300 00	360 00	260 00	143 06	164 14	122 48	
	Huntingdon	.....	1	.....	.....	3	2	3	180 00	120 00	125 00	85 83	54 71	58 88	
	Stirling	.....	4	.....	.....	5	6	10	320 00	360 00	380 00	152 59	164 14	179 02	
	Madoc, Township	.....	.....	.....	.....	2	2	2	120 00	120 00	120 00	57 23	54 71	56 53	
	Elzevir and Grimsthorpe	.....	.....	.....	.....	2	2	2	120 00	140 00	120 00	57 23	63 83	56 53	
	Tudor, Limerick, Wollaston, and Cashel	.....	.....	.....	.....	4	3	4	240 00	180 00	240 00	114 45	82 07	113 06	
	Monteagle and Herschel	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	28 60	27 36	28 26	
	Rawdon	.....	.....	.....	.....	2	2	2	120 00	120 00	120 00	57 23	54 71	56 53	
	Madoc, Village	.....	.....	.....	.....	5	7	6	340 00	460 00	640 00	162 13	209 73	428 43	
	Wicklow and Bangor	.....	.....	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	28 26	
WEST HASTINGS.	Belleville	1	4	.....	.....	36	38	41	5830 00	5872 50	5475 00	4236 38	4205 75	3869 77	
	Trenton	.....	4	.....	.....	9	10	17	1125 00	1310 00	1597 50	905 82	1027 45	1124 69	
	Sidney	2	2	.....	.....	4	6	7	240 00	270 00	330 00	143 58	154 42	185 52	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
EAST HURON.	Grey	8	8	8																
	McKillop	4	4	4																
	Hullett, East part	2	2	2																
	Morris	2	2	3																
	Howick	9	9	9		1														
	Turnberry, East part	4	3	3																
	Brussels	5	3	3		1	1	1												
	Wroxeter	3	3	3		1	1	1												
SOUTH HURON.	Exeter	5	5	5		3	3	3								1				
	Seaforth	7	7	7		3	2	2												
	Goderich, Township, S. part	1	1	1																
	Bayfield	4	4	3		2	1	1						1						
	Stephen	11	11	11								1	1							
	Usborne	3	3	3																
	Hay	8	8	7		1	1							1						
	Tuckersmith	4	4	4		1	1	1												
	Stanley	4	4	4																
WEST HURON.	Goderich, Town	10	10	10		3	3	3												
	Wawanosh, East	2	2	2																
	Hullett, West part	1	1	1																
	Wawanosh, West	3	3	3																
	Turnberry, West part	2	2	1																
	Wingham	7	7	7		3	2	2								1				
	Clinton	7	7	7		2	1	1												
	Ashfield	5	5	4																
	Colborne	8	7	7								1	1	1						
	Blythe	4	4	4		1	1	1												

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
EAST HURON.	Grey	....	....	....	....	8	8	8	480 00	486 00	480 00	235 37	237 67	237 68	
	McKillop	1	1	....	....	4	5	5	240 00	245 00	265 00	117 69	119 82	131 21	
	Hullett, East part	....	2	....	....	2	2	4	120 00	120 00	130 00	58 84	58 68	64 38	
	Morris	....	....	....	....	2	2	3	120 00	120 00	180 00	58 84	58 68	89 13	
	Howick	2	2	....	....	10	11	11	630 00	565 00	550 00	308 94	276 31	272 36	
	Turnberry, East part	....	....	....	....	4	3	3	240 00	180 00	180 00	127 50	88 02	89 15	
	Brussels	....	1	....	....	6	6	7	650 00	690 00	685 00	466 54	485 62	485 61	
	Wroxeter	....	1	....	....	3	3	4	225 00	225 00	185 00	133 27	133 01	91 62	
SOUTH HURON.	Exeter	....	2	....	....	8	8	10	620 00	619 00	620 00	407 06	398 12	403 42	
	Seaforth	1	2	....	....	10	11	11	1730 00	1505 00	1480 00	1347 53	1176 14	1148 48	
	Goderich, Township, S. part	....	....	....	....	1	1	1	60 00	60 00	80 00	33 92	33 51	44 64	
	Bayfield	....	....	....	....	6	5	5	400 00	300 00	295 00	226 16	167 58	164 60	
	Stephen	2	2	....	....	12	13	13	725 00	690 00	670 00	409 90	385 42	373 84	
	Usborne	....	2	....	....	4	4	5	300 00	235 00	210 00	169 61	131 27	117 16	
	Hay	....	2	....	....	9	9	10	580 00	560 00	485 00	327 93	312 80	270 62	
	Tuckersmith	....	1	....	....	5	5	6	300 00	300 00	325 00	169 61	167 58	181 33	
	Stanley	....	1	....	....	4	4	5	240 00	260 00	245 00	135 70	145 24	136 70	
WEST HURON.	Goderich, Town	....	2	....	....	13	13	15	1665 00	1665 00	1655 00	1192 23	1187 45	1185 18	
	Wawanosh, East	....	....	....	....	2	2	2	180 00	185 00	120 00	101 26	103 18	67 31	
	Hullett, West part	....	....	....	....	1	1	1	60 00	60 00	60 00	33 72	33 47	33 66	
	Wawanosh, West	....	....	....	....	3	3	3	180 00	180 00	200 00	101 19	100 39	112 19	
	Turnberry, West part	2	....	....	....	2	4	2	120 00	150 00	75 00	67 46	83 66	42 08	
	Wingham	....	6	....	....	11	10	15	982 50	935 00	990 00	597 25	603 33	634 35	
	Clinton	....	....	....	....	9	8	8	1235 00	850 00	850 00	893 53	566 95	568 98	
	Ashfield	....	....	....	....	5	5	4	352 75	300 00	240 00	198 66	167 33	134 62	
	Colborne	....	1	....	....	8	8	9	480 00	485 52	440 00	269 88	270 80	246 81	
	Blythe	....	1	....	....	5	5	6	375 00	375 00	420 00	245 67	242 33	268 52	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.		Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.	Beer and Wine.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
EAST KENT.	Howard	3	....	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Bathurst	3	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dresden	4	4	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Thamesville	4	5	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Camden	3	3	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dawn	2	2	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Bothwell	4	4	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Harwich	9	10	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Orford	8	7	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ridgetown	4	4	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WEST KENT.	Chatham, Town	16	13	5	5	6	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Chatham, Township	4	5	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dover	3	4	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wallaceburg	4	4	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Tilbury, East	.....	.....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Raleigh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
KINGSTON.	Kingston, City	62	62	20	20	3	3	2	....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
EAST KENT.	Howard	2	.....	.....	.....	6	8	5	360 00	374 00	300 00	199 17	208 04	168 02	
	Blenheim	.....	1	.....	.....	3	3	5	255 00	255 00	345 00	174 59	175 10	237 22	
	Dresden	1	4	.....	.....	4	6	9	460 00	507 00	540 00	325 98	370 60	390 42	
	Thamesville	.....	.....	.....	.....	4	4	4	325 00	475 00	495 00	217 78	359 58	371 82	
	Camden	1	1	.....	.....	2	3	3	140 00	147 00	125 00	77 47	81 74	70 01	
	Bothwell	1	.....	.....	.....	5	6	5	660 00	647 00	610 00	463 38	457 45	434 01	
	Harwich	4	3	.....	.....	10	14	14	600 00	693 00	695 00	331 96	385 35	389 23	
	Orford	1	.....	.....	.....	8	8	7	520 00	467 00	460 00	287 69	259 55	257 61	
	Ridgetown	2	2	.....	.....	6	8	8	670 00	664 00	660 00	500 24	498 04	497 23	
WEST KENT.	Chatham, Town	.....	7	.....	.....	22	20	26	7335 00	6870 00	6625 00	6415 01	5976 24	5761 31	
	Chatham, Township	.....	3	.....	.....	4	4	8	340 00	260 00	315 00	204 10	116 55	142 26	
	Dover	.....	.....	.....	.....	3	3	4	225 00	295 00	300 00	130 90	157 08	168 39	
	Wallaceburg	.....	1	.....	.....	5	5	6	630 00	651 00	675 00	473 18	473 91	485 81	
	Tilbury, East	.....	.....	.....	.....	.....	.....	.....	.....	.....	20 00	.....	.....	.....	Dunkin Act in force 1879-80-1-2.
	Raleigh	.....	.....	.....	.....	.....	.....	.....	90 00	60 00	16 62	42 95	26 90	.....	
KINGSTON.	Kingston, City	.....	6	.....	.....	85	85	92	12500 00	12550 00	12790 00	8856 23	8932 45	9148 41	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary. 1879-80.	Tavern. Ordinary. 1880-1.	Tavern. Ordinary. 1881-2.	Tavern. Beer and Wine. 1881-2.	Shop. 1879-80.	Shop. 1880-1.	Shop. 1881-2.	Wholesale. 1879-80.	Wholesale. 1880-1.	Wholesale. 1881-2.	Extended Tavern. 1879-80.	Extended Tavern. 1880-1.	Extended Tavern. 1881-2.	Extended Shop. 1879-80.	Extended Shop. 1880-1.	Extended Shop. 1881-2.	Six Months. 1879-80.	Six Months. 1880-1.	Six Months. 1881-2.
EAST LAMBTON.	Forest	5	5	5	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Bosanquet	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Warwick	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brooke	3	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wyoming	3	3	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Watford	4	4	4	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Euphemia	3	3	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Plympton	3	3	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Arkona	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Thedford	3	3	2	1	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Alvinston, Village	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WEST LAMBTON.	Petrolia	8	7	8	.....	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Moore	9	9	9	.....	2	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sarnia, Township	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Sombra	7	6	6	.....	4	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Oil Springs	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Enniskillen	3	2	2	.....	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dawn	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sarnia, Town	9	9	9	.....	7	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Point Edward	4	5	4	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
NORTH LANARK.	Lanark, Village	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pakenham	3	3	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dalhousie	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Almonte	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Carleton Place	4	4	4	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ramsay	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lanark, Township	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
EAST LAMBTON.	Forest	.....	2	.....	1	7	7	10	800 00	800 00	727 50	592 50	598 40	540 63	Scott Act in force for first two months of 1881-2 and four licenses granted thereunder, viz.: in Forest, Watford, Arkona, and Alvinston. The ordinary licenses mentioned in this Schedule issued for remainder of the year.
	Bosanquet	.....	.....	.....	.....	2	1	1	170 00	110 00	45 00	118 13	68 77	32 37	
	Warwick	.....	.....	.....	.....	2	2	2	120 00	140 00	100 00	63 42	75 86	49 49	
	Brooke	.....	1	.....	.....	3	4	2	220 00	240 00	55 00	116 25	130 04	27 21	
	Wyoming	.....	.....	.....	.....	4	4	4	340 00	320 00	280 00	217 39	210 04	178 97	
	Watford	.....	.....	.....	.....	6	6	6	740 00	780 00	642 50	551 36	578 41	488 45	
	Euphemia	.....	.....	.....	.....	4	4	3	370 00	370 00	195 00	247 39	250 88	119 23	
	Plympton	.....	1	.....	.....	3	4	4	300 00	340 00	275 00	215 12	220 88	166 39	
	Arkona	.....	1	.....	.....	2	2	3	240 00	220 00	207 50	173 98	165 02	151 96	
	Thedford	.....	..	.....	.....	4	5	5	565 00	600 00	510 00	432 95	462 55	383 70	
	Alvinston, Village	.....	.....	.....	.....	.....	.....	3	.....	.....	202 50	.....	.....	114 13	
WEST LAMBTON.	Petrolia	.....	3	.....	.. ..	11	10	14	890 00	915 00	855 03	521 76	573 72	527 95	Scott Act in force for first two months of 1881-2, and four licenses issued thereunder, viz.: Two in Petrolia, one in Moore, and one in Sombra. The ordinary licenses mentioned in the Schedule issued for remainder of the year.
	Moore	1	3	.....	.....	11	11	14	720 00	605 00	587 50	422 08	353 20	334 51	
	Sarnia, Township	.....	.....	.....	.....	2	1	1	125 00	90 00	60 00	79 48	56 69	38 58	
	Sombra	.....	2	.....	.....	11	10	11	720 00	600 00	502 50	422 07	350 33	285 90	
	Oil Springs	.....	.....	.....	.....	2	2	2	120 00	120 00	100 00	70 35	70 06	57 19	
	Enniskillen	.....	....	.....	.....	5	4	3	300 00	240 00	150 00	175 87	140 12	85 77	
	Dawn	.....	.. ..	.....	.....	.....	1	1	20 00	60 00	50 00	11 72	35 03	28 59	
	Sarnia, Town	....	2	.....	...	16	15	17	2420 00	1800 00	1648 41	1882 09	1300 59	1199 48	
	Point Edward	.....	4	.....	.....	6	5	9	480 00	500 00	445 00	326 92	375 13	340 09	
NORTH LANARK.	Lanark, Village	.....	.....	...	.....	2	2	2	220 00	220 00	220 00	144 33	146 47	148 17	
	Pakenham	.....	.....	.....	.....	4	4	4	230 00	240 00	280 00	84 96	92 95	112 42	
	Dalhousie	.....	.....	.....	.....	2	2	2	120 00	140 00	120 00	44 33	54 21	48 17	
	Almonte	.....	1	.....	.....	4	4	5	400 00	400 00	525 00	248 65	252 95	306 53	
	Carleton Place	.....	.....	.....	.....	5	5	5	580 00	520 00	645 00	340 37	336 20	390 62	
	Ramsay	.....	1	.....	.....	3	3	4	147 50	255 00	215 00	82 17	144 70	104 09	
	Lanark, Township	.....	.....	.....	.....	.....	.....	.....	33 69	.....	.....	3 81	.....	.....	Dunkin Act in force, 1879-82.

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
SOUTH LANARK.	Perth	7	7	7	3	4	3	....	....	....	....	....	....	....	....	....	....	....	....
	Smith's Falls	4	4	5	1	2	1	....	....	....	....	....	....	....	....	....	1	....	....
	Beckwith	1	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Bathurst	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Drummond	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	South Sherbrooke	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	North Elmsley	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	"	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
NORTH LEEDS AND GRENVILLE SOUTH GRENVILLE.	Prescott	9	9	9	5	5	3	....	....	....	....	....	....	....	....	....	....	....	....
	Edwardsburgh	8	6	6	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....
	South Elmsley	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Kemptville	4	4	4	1	1	2	....	....	....	....	....	....	....	....	....	....	....	....
	Kitley	5	5	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Oxford	2	4	3	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....
	Augusta	5	4	4	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....
	Merrickville	3	3	3	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....
	Wolford	3	3	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Cardinal, Village	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Gower, South	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	"	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
LENNOX.	Napanee	8	7	7	1	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	Bath	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Adolphustown	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Amherst Island	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Ernestown	....	5	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Richmond	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
SOUTH LANARK.	Perth	1				10	12	10	1500 00	1695 00	1500 00	1047 03	1248 71	1070 47	
	Smith's Falls		1			6	6	7	816 00	970 00	930 00	631 50	761 83	734 01	
	Beckwith					1	2	2	75 00	140 00	120 00	32 54	63 31	55 57	
	Bathurst					1	1	1	55 00	60 00	60 00	23 86	27 13	27 78	
	Drummond		1			2	2	3	139 17	130 00	135 00	65 58	64 26	67 88	
	South Sherbrooke							1			60 00			27 78	
	North Elmsley										40 00			18 52	Dunkin Act in force.
NORTH LEEDS AND GRENVILLE AND SOUTH GRENVILLE.	Prescott		3			14	14	15	2125 00	2085 00	1910 00	1576 73	1550 77	1405 34	
	Edwardsburgh		1			9	6	4	580 00	380 00	160 00	310 50	201 95	83 47	
	South Elmsley					2	2	2	120 00	120 00	120 00	64 24	63 78	62 60	
	Kemptville		2			5	5	8	520 00	700 00	970 00	375 42	559 43	764 32	
	Kitley		2			5	5	7	320 00	300 00	310 00	171 31	159 43	161 72	
	Oxford					2	2	3	120 00	120 00	180 00	64 24	63 78	93 90	
	Augusta		1			5	5	6	300 00	300 00	280 00	160 62	159 43	146 07	
	Merrickville		1			4	4	5	420 00	440 00	405 00	299 20	308 81	287 81	
	Wolford					3	3	2	200 00	180 00	120 00	107 08	95 67	62 60	
	Cardinal, Village						2	2		150 00	150 00		93 78	92 60	
	Gower, South														Dunkin Act in force, 1879-82.
LENNOX.	Napanee		2			9	9	12	1800 00	1840 00	2000 00	1340 17	1412 49	1504 68	
	Bath					4	4	4	240 00	240 00	240 00	86 71	104 98	110 78	
	Adolphustown					1	1	1	60 00	60 00	93 55	21 67	26 24	43 30	
	Amherst Island		1			2	2	3	120 00	120 00	125 00	43 37	52 50	57 71	
	Ernestown		1				5	6		320 00	325 00		140 00	150 62	
	Richmond								20 00		20 00	7 23		9 23	Dunkin Act in force, 1879-82.

SCHEDULE C.—Comparative Statement by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary. 1879-80.	Tavern. Ordinary. 1880-1.	Tavern. Ordinary. 1881-2.	Tavern. Beer and Wine. 1881-2.	Shop. 1879-80.	Shop. 1880-1.	Shop. 1881-2.	Wholesale. 1879-80.	Wholesale. 1880-1.	Wholesale. 1881-2.	Extended Tavern. 1879-80.	Extended Tavern. 1880-1.	Extended Tavern. 1881-2.	Extended Shop. 1879-80.	Extended Shop. 1880-1.	Extended Shop. 1881-2.	Six Months. 1879-80.	Six Months. 1880-1.	Six Months. 1881-2.
LINCOLN.	Niagara, Township	3	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	St. Catharines	33	35	31	.....	11	7	10	.....	.....	.....	.....	.....	3	.....	.....	.....	3	2	1
	Grimsby, Township	3	2	2	....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Grantham	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Merritton	5	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	2
	Louth	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Port Dalhousie	4	4	4	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Clinton	4	4	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Grimsby, Village	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Niagara, Town	5	5	5	.....	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Beamsville, Village	...	.....	3	.....	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
LONDON.	London, City	57	45	45	.....	36	27	24	2	2	2	1	14	4	1	10	1	.....	.....	1 Beer and Wine.
EAST MIDDLESEX.	London, Township	28	25	27	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Dorchester	8	6	6	.....	1	1	1	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Petersville	3	3	3	...	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Westminster	19	20	21	....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	London East, Village	10	10	10	.....	4	3	3	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1
	West Nissouri	4	4	4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	London West, Village	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

Licenes District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals, and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
LINCOLN.	Niagara, Township	.....	2	.....	.....	3	4	5	200 00	240 00	190 00	111 80	139 49	106 43	
	St. Catharines	.....	8	.....	1	47	44	54	5327 50	5105 00	4923 75	3279 10	3236 91	3036 83	
	Grimsby, Township	.....	.....	.....	.....	4	3	3	240 00	200 00	180 00	134 17	116 24	100 84	
	Grantham	.....	.....	.....	.....	3	3	3	200 00	220 00	180 00	111 82	127 80	100 84	
	Merritton	.....	1	.....	.....	6	5	7	650 00	675 00	630 00	460 43	561 96	495 85	
	Louth	.....	.....	.....	.....	4	4	4	240 00	240 00	240 00	134 17	139 53	134 44	
	Port Dalhousie	.....	1	.....	.....	6	6	7	1025 00	747 50	692 50	879 52	584 17	545 16	
	Clinton	.....	.....	.....	.....	5	5	1	320 00	300 00	60 00	178 89	174 37	33 61	
	Grimsby, Village	.....	.....	.....	.....	3	3	3	240 00	240 00	260 00	160 62	164 62	172 03	
	Niagara, Town	.....	.....	.....	1	8	8	8	720 00	600 00	525 00	402 51	348 73	294 10	
	Beamsville, Village	.....	1	.....	.....	.....	.....	5	.....	.....	245 00	.....	.....	137 25	
LONDON.	London, City	.....	9	.....	.....	97	98	86	12011 60	10591 69	9788 23	7699 21	6842 27	6028 47	
EAST MIDDLESEX.	London, Township	.....	4	.....	.....	29	25	31	1840 00	1580 00	1740 00	1076 59	882 05	1018 15	
	North Dorchester	.....	1	.....	.....	9	7	8	560 00	420 00	425 00	327 66	238 08	245 09	
	Petersville	.....	.....	.....	.....	5	5	5	560 00	620 00	540 00	427 25	452 13	415 56	
	Westminster	.....	3	.....	.....	21	21	25	1360 00	1340 00	1389 00	795 74	748 08	812 84	
	London East, Village	.....	2	.....	.....	15	14	16	1631 25	1640 00	1735 00	1235 05	1182 88	1270 20	
	West Nissouri	.....	2	.....	...	4	5	7	240 00	340 00	370 00	140 43	189 81	216 47	
	London West, Village	.....	.....	.....	....	.....	....	.....	.....	.....	80 00	.....	.....	46 75	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
NORTH MIDDLESEX.	East Williams	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	McGillivray	3	4	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Adelaide	4	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Biddulph	5	5	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Ailsa Craig	3	3	3	2	2	2	....	....	....	....	....	1	....	....	....	....	....	....
	Lobo	5	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Parkhill	5	5	5	1	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	Lucan	4	4	4	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	West Williams	3	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
WEST MIDDLESEX.	Ekfrid	4	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Strathroy	6	6	6	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....
	Wardsville	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Metcalfe	3	3	4	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
	Delaware	4	4	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....
	Caradoc	2	2	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Glencoe	5	5	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Mosa	4	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Newbury	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
MONCK.	Wainfleet	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Canborough	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Caistor	2	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Sherbrooke	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Dunnville	5	5	6	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	Gainsborough	3	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Pelham	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH MIDDLESEX.	East Williams	.....	1	.....	.....	3	3	4	180 00	180 00	185 00	93 31	91 79	92 95	
	McGillivray	.....	1	.....	.....	3	4	4	260 00	240 00	205 00	134 81	122 37	102 99	
	Adelaide	.....	.....	.....	.....	4	3	3	240 00	180 00	180 00	124 42	91 79	90 43	
	Biddulph	1	1	.....	.....	5	6	6	320 00	326 00	305 00	165 91	166 22	153 23	
	Ailsa Craig	1	.....	.....	.....	5	6	6	405 00	411 00	423 75	260 54	261 02	267 00	
	Lobo	.....	1	.....	.....	5	4	5	380 00	260 00	245 00	197 01	132 57	123 09	
	Parkhill	.....	1	.....	.....	6	7	8	595 00	795 00	860 00	412 02	579 33	608 71	
	Lucan	1	1	.....	.....	6	7	7	620 00	485 00	505 00	437 02	306 10	313 42	
	West Williams	.....	.....	.....	.....	3	2	2	180 00	120 00	140 00	93 31	61 19	70 33	
WEST MIDDLESEX.	Ekfrid	.....	1	.....	.....	4	4	5	240 00	240 00	245 00	120 80	120 95	126 78	
	Strathroy	.....	2	.....	.....	11	11	13	1400 00	1500 00	1430 00	962 96	1013 78	990 89	
	Wardsville	.....	1	.....	.....	3	3	4	225 00	225 00	270 00	135 60	135 71	161 43	
	Metcalfe	.....	.....	.....	.....	4	4	4	240 00	240 00	240 00	120 80	120 95	124 19	
	Delaware	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	90 60	90 71	93 15	
	Caradoc	.....	.....	.....	.....	6	5	6	360 00	340 00	360 00	181 20	171 61	186 29	
	Glencoe	.....	.....	.....	.....	4	4	4	360 00	360 00	360 00	240 80	240 95	244 19	
	Mosa	.....	1	.....	.....	.....	.....	2	20 00	.....	65 00	10 06	.....	33 63	
	Newbury	.....	1	.....	.....	3	3	4	255 00	255 00	260 00	165 60	165 71	170 73	
MONCK.	Wainfleet	.....	.....	.....	.....	3	3	3	200 00	180 00	200 00	74 52	64 68	79 70	
	Canborough	.....	.....	.....	.....	2	1	2	120 00	60 00	90 00	44 71	21 56	35 86	
	Caistor	.....	.....	.....	.....	2	1	2	120 00	60 00	120 00	44 71	21 56	47 82	
	Sherbrooke	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	22 35	21 56	23 91	
	Dunnville	.....	2	.....	.....	7	7	10	920 00	920 00	1050 00	643 92	638 10	731 19	
	Gainsborough	.....	1	.....	.....	3	4	5	180 00	280 00	245 00	67 07	100 59	97 63	
	Pelham	.....	.....	.....	.....	.....	.....	.....	.....	.....	50 00	.....	.....	19 93	Dunkin Act in force, 1879-82.

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern		Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.														
		1879-80.	1880-1.	1881-2.	1881-2.	1880-1.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
MUSKOKA AND PARRY SOUND.	Morrison	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Bracebridge	4	4	4	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	McKellar	1	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Foley	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Stephenson	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wood and Medora	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Macaulay	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Draper and Oakley	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Humphrey	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Gravenhurst	4	5	5	.....	1	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sisted	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	McDougall	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	McLean and Ridout	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Unorganized Territory, including the Townships of Chaffey, Spence, Chapman and Perry	17	20	17	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Armour	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ryde	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NIPISSING.	Nipissing District Unorganized Territory	3	3	10	1	1	1	1	8	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed. Transfers. 1880-1.	Transfers. 1881-2.	Removals. 1880-1.	Removals. 1881-2.	Total. 1879-80.	Total. 1880-1.	Total. 1881-2.	Amounts received for Licenses, Transfers, Removals and Fines in each Municipality. 1879-80.	1880-1.	1881-2.	Amounts paid to Municipalities. 1879-80.	1880-1.	1881-2.	Remarks.
MUSKOKA AND PARRY SOUND.	Morrison					1	1	1	60 00	60 00	60 00	32 54	33 67	33 25	
	Bracebridge		1			4	6	7	340 00	480 00	495 00	221 00	313 24	314 42	
	McKellar					1	1	1	60 00	60 00	60 00	32 54	33 67	33 25	
	Foley		1			2	2	3	120 00	120 00	164 87	65 08	67 33	91 36	
	Stephenson					2	2	2	120 00	120 00	120 00	65 08	67 33	66 49	
	Wood and Medora		1			1	1	2	60 00	60 00	65 00	32 54	33 66	36 02	
	Macaulay					1	2	3	60 00	140 00	180 00	32 54	78 56	99 74	
	Draper and Oakley					2	2	2	140 00	120 00	120 00	75 92	67 33	66 49	
	Humphrey					3	4	4	150 00	210 00	210 00	81 34	117 83	116 37	
	Gravenhurst		2			5	7	9	300 00	420 00	470 00	162 70	235 69	260 43	
	Stisted					1	1	1	60 00	60 00	60 00	32 54	33 67	33 25	
	McDougall								35 26	30 52		11 48	1 02		Dunkin Act in force. Of amount received $45.78 on account of expenses.
	McLean and Ridout							1	15 26	50 52	70 00	64	14 35	43 25	Duncan Act assumed to be in force '79-80-1. Amount received in those years was in respect of expenses.
	Unorganized Territory, including the Townships of Chaffey, Spence, Chapman and Perry		2			17	20	20	1040 00	1220 00	1085 00				Payable to the Province, less proportion of expenses.
	Armour							2			120 00			66 49	
	Ryde									20 00			11 22		
NIPISSING.	Nipissing District—Unorganized Territory		3			4	4	22	240 00	240 00	1545 00				Payable to the Province, less expenses.

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary.			Tavern. Beer and Wine.	Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
NORFOLK.	Middleton	8	8	9		1	1	1												
	Townsend	1																		
	Walsingham	5	6	7		1														
	Simcoe	9	7	8		3	3	3												
	Windham	10	11	11																
	Woodhouse	2	2	2																
	Charlotteville	8	7	8																
	Houghton	2	3	4																
	Waterford	2	3	2		1	1	1												
	Port Dover	4	4	4		1	1	1												
EAST NORTHUMBERLAND.	Seymour	2	2	1																
	Murray	3	3	2																
	Cramahe	2	2	2																
	Percy	3	3	3		1	1	1												
	Colborne	3	4	4		1	1	1												
	Campbellford	4	4	5		2	2	2					1						1	1
	Hastings	3	3	3		1	2	2											1	
	Brighton, Village	5	4	3	1															
	Brighton, Township																			
WEST NORTHUMBERLAND.	Alnwick	1	1	1														1	1	1
	South Monaghan	3	2	2																
	Haldimand	3	3	4																
	Hamilton	7	7	7																
	Cobourg, Town	14	14	12		5	5	5						2						

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
			1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORFOLK.	Middleton	..	2	.....	.....	9	9	12	580 00	540 00	610 00	315 05	294 61	331 54	
	Townsend	....	.....	.....	.....	1	.....	.....	80 00	20 00	20 00	43 46	10 91	10 87	
	Walsingham	....	1	.....	.....	6	6	8	380 00	360 00	470 00	206 41	196 42	255 45	
	Simcoe	.....	3	.....	.....	12	10	14	1260 00	1120 00	1175 00	791 05	702 05	739 08	
	Windham	....	3	.....	.....	10	11	14	735 00	750 00	695 00	399 25	409 16	377 75	
	Woodhouse	.....	.....	.....	.....	2	2	2	120 00	150 00	120 00	67 18	81 85	65 22	
	Charlotteville	.....	3	.....	.....	8	7	11	425 00	450 00	535 00	230 96	245 51	290 79	
	Houghton	.....	.....	.....	.....	3	4	4	120 00	180 00	240 00	65 18	98 22	130 44	
	Waterford	.....	.....	.....	.....	3	4	3	195 00	255 00	195 00	112 77	145 95	112 85	
	Port Dover	.....	2	.....	.....	5	5	7	425 00	425 00	435 00	287 95	288 67	293 49	
EAST NORTHUMBERLAND.	Seymour	.....	1	.....	.....	2	2	2	140 00	120 00	65 00	62 78	57 18	29 98	
	Murray	.....	1	.....	.....	3	3	3	160 00	220 00	125 00	71 75	104 83	57 66	
	Cramahe	....	.....	.....	.....	2	2	2	150 00	150 00	150 00	83 81	87 18	85 35	
	Percy	.....	1	.....	.....	4	4	5	320 00	320 00	325 00	187 62	194 36	193 02	
	Colborne	.....	1	.....	.....	4	5	6	260 00	300 00	305 00	116 59	142 96	140 71	
	Campbellford	.....	1	.....	.....	6	8	9	550 00	510 05	567 50	296 29	296 07	322 39	
	Hastings	.....	.....	.....	.....	4	6	5	420 00	570 00	500 00	276 59	386 78	338 40	
	Brighton, Village	.....	1	.....	.....	5	4	5	450 00	380 00	295 00	284 54	243 90	168 42	
	Brighton, Township	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	Dunkin Act in force '79-80-1-2.
WEST NORTHUMBERLAND.	Alnwick	.....	.....	.....	.....	2	2	2	90 00	90 00	120 00	47 64	43 16	64 28	
	South Monaghan	....	.....	.....	.....	3	3	2	180 00	120 00	120 00	95 28	57 55	64 26	
	Haldimand	.....	.....	.....	.....	3	3	4	220 00	230 00	240 00	116 46	110 28	128 54	
	Hamilton	....	1	.....	.....	7	7	8	420 00	460 00	455 00	222 34	220 59	243 68	
	Cobourg, Town	.....	3	.....	.....	19	19	22	2945 00	3123 00	2957 50	2229 67	2314 28	2193 62	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary. 1879-80.	Tavern. Ordinary. 1880-1.	Tavern. Ordinary. 1881-2.	Tavern. Beer and Wine. 1881-2.	Shop. 1879-80.	Shop. 1880-1.	Shop. 1881-2.	Wholesale. 1879-80.	Wholesale. 1880-1.	Wholesale. 1881-2.	Extended Tavern. 1879-80.	Extended Tavern. 1880-1.	Extended Tavern. 1881-2.	Extended Shop. 1879-80.	Extended Shop. 1880-1.	Extended Shop. 1881-2.	Six Months. 1879-80.	Six Months. 1880-1.	Six Months. 1881-2.
NORTH ONTARIO.	Reach	6	5	6	.. ..	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Uxbridge, Village	4	4	4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brock	4	4	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Mara	4	5	4	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Thorah	3	3	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Port Perry	4	4	4	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Uxbridge, Township	4	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Scott	2	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Rama	.....	2	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Cannington, Village	3	3	2	.....	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTH ONTARIO.	Oshawa	6	6	6	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Whitby, Town	7	7	7	1	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Whitby, Township	3	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Whitby, East, Township	2	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pickering	9	9	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
OTTAWA.	Ottawa, City	73	75	75	.....	71	72	77	.....	.....	.....	.....	.....	.....	.....	1	2	1	.....	1
NORTH OXFORD.	East Nissouri	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Blandford	3	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Zorra	4	3	4	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Embro	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	West Zorra	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Woodstock	11	11	13	.....	4	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Blenheim	13	13	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
NORTH ONTARIO.	Reach	.....	.....	.....	.....	7	6	7	445 00	360 00	450 00	186 96	185 01	224 09	
	Uxbridge, Village	.....	1	.....	.....	4	4	6	420 00	400 00	595 00	269 24	285 35	401 72	
	Brock	.....	1	.....	.....	4	4	6	260 00	240 00	305 00	109 24	123 35	151 87	
	Mara	.....	1	.....	.....	5	6	6	410 00	450 00	325 00	201 44	246 57	161 84	
	Thorah	.....	1	.....	.....	4	4	5	320 00	300 00	305 00	169 25	183 35	182 01	
	Port Perry	.....	1	.....	.....	6	6	7	980 00	920 00	920 00	724 87	735 27	731 71	
	Uxbridge, Township	.....	.....	.....	.....	4	5	5	240 00	300 00	300 00	100 84	154 17	149 38	
	Scott	.....	.....	.....	.....	2	3	3	140 00	185 00	200 00	58 82	92 50	99 60	
	Rama	.....	.....	.....	.....	.....	3	3	80 00	260 00	240 00	33 55	133 61	119 52	
	Cannington, Village	.....	.....	.....	.....	4	5	4	300 00	425 00	450 00	160 84	279 17	279 31	
SOUTH ONTARIO.	Oshawa	1	1	.....	.....	7	8	8	1340 00	1245 00	1125 00	952 22	899 51	842 95	
	Whitby, Town	.....	7	.....	.....	9	9	17	1180 00	1160 00	1195 00	792 25	777 74	802 03	
	Whitby, Township	.....	.....	.....	.....	3	2	2	300 00	220 00	190 00	212 76	151 39	122 50	
	Whitby, East, Township	.....	1	.....	.....	2	3	4	150 00	210 00	215 00	82 14	111 99	116 17	
	Pickering	1	2	.....	.....	9	10	11	1320 00	1290 00	775 00	1029 19	1010 66	488 13	
OTTAWA.	Ottawa, City	1	2	2	7	145	151	164	18765 00	18904 00	19320 00	12702 17	12974 79	13330 80	
NORTH OXFORD.	East Nissouri	.....	.....	.....	.....	2	2	2	140 00	120 00	160 00	77 18	65 86	88 85	
	Blandford	.....	.....	.....	.....	3	3	2	180 00	180 00	120 00	99 23	98 79	66 64	
	East Zorra	1	1	.....	.....	6	6	7	360 00	305 00	365 00	198 44	167 40	202 71	
	Embro	1	1	.....	.....	3	3	3	200 00	205 00	285 00	146 16	148 61	193 85	
	West Zorra	.....	2	.....	.....	2	2	5	205 00	140 00	190 00	112 99	76 83	105 52	
	Woodstock	.....	2	.....	.....	15	16	20	1930 00	1990 00	2100 00	1288 30	1349 28	1437 46	
	Blenheim	.....	3	.....	.....	13	13	15	800 00	780 00	735 00	440 99	428 03	408 19	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
SOUTH OXFORD.	Ingersoll	11	11	12	4	5	4	....	....	....	....	....	....	....	....	....	....	....	....
	Tilsonburg	4	4	5	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	Norwich, Village	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	North Oxford	4	4	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	North Norwich	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	South Norwich	6	6	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Dereham	4	5	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	West Oxford	2	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	East Oxford	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PEEL.	Brampton	6	6	6	2	2	2	....	....	....	1	....	....	....	....	....	....	....	....
	Chinguacousy	12	12	11	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....
	Toronto	14	14	13	2	1	1	....	....	....	....	....	1	....	....	1	....	1	1
	Toronto Gore	4	4	4	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....
	Streetsville	2	2	2	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....
NORTH PERTH.	Mornington	16	16	13	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....
	Ellice	6	5	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wallace	4	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Elma	5	6	6	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
	Logan	3	3	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Listowel	8	7	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Stratford	20	20	20	2	3	4	....	....	....	....	....	....	....	....	....	....	....	....
	North Easthope	4	4	3	8	9	8	....	....	....	....	....	....	....	....	....	....	....	....
	Milverton, Village	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licen. Transferred and Removed.		Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.	Removals.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.		
		1880-1.	1881-2.										
SOUTH OXFORD.	Ingersoll	....	2	16	18	15	$ c. 2855 00	$ c. 2660 00	$ c. 1925 07	$ c. 2165 71	$ c. 2037 92		
	Tilsonburg	....	3	6	10	6	660 00	860 00	368 31	398 63	583 79		
	Norwich, Village	....	....	3	3	3	180 00	240 00	95 11	117 87	128 38		
	North Oxford	....	2	4	5	4	240 00	260 00	124 13	139 32	101 80		
	North Norwich	....	1	2	3	2	120 00	125 00	62 08	64 30	66 96		
	South Norwich	....	1	6	6	6	420 00	245 00	217 28	205 62	131 26		
	Dereham	....	....	5	4	5	240 00	240 00	124 14	184 85	128 38		
	West Oxford	....	....	2	1	2	140 66	120 00	72 42	64 30	64 30		
	East Oxford	....	....	1	1	1	60 00	60 00	31 04	32 16	32 15		
PEEL.	Brampton	....	2	8	10	9	1051 25	1000 00	734 57	708 36	698 55		
	Chinguacousy	....	1	12	12	13	877 50	840 00	525 86	506 28	456 35		
	Toronto	....	2	16	18	17	1102 50	1062 50	1028 75	682 12	580 75		
	Toronto Gore	....	1	5	6	5	300 00	300 00	305 00	160 28	158 85		
	Streetsville	....	2	3	5	3	240 00	260 00	250 00	146 17	167 30	158 97	
NORTH PERTH.	Mornington	..	2	17	16	17	1100 00	1021 00	850 00	646 49	593 06	478 00	
	Ellice	....	....	5	6	6	360 00	320 00	420 00	211 62	185 87	227 49	
	Wallace	....	....	3	3	4	320 00	180 00	180 00	188 09	104 57	102 43	
	Elma	....	1	6	8	5	300 00	380 00	380 00	176 32	220 72	260 00	
	Logan	....	....	3	2	3	180 00	180 00	140 00	105 81	104 56	79 67	
	Listowel	....	4	10	15	4	1940 00	1370 00	1450 00	952 47	1034 69	1019 82	
	Stratford	....	7	29	35	28	4925 00	4374 00	4535 00	3349 92	3391 48	3271 62	
	North Easthope	....	....	4	4	4	240 00	240 00	210 00	141 08	139 12	119 50	
	Milverton, Village	....	....	....	3	....	....	180 00	....	....	....	102 43	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
SOUTH PERTH.	South Eastshope	6	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fullarton	3	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Mitchell	7	7	7	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hibbert	6	6	6	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Downie	7	7	6	3	2	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	St. Mary's	10	11	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Blanchard	5	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
EAST PETERBORO'.	Ashburnham	3	2	2	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Asphodel	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dummer	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Otonabee	4	6	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Burleigh, Anstruther and Chandos	4	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Norwood	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
	Belmont and Methuen	1	1	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Douro	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WEST PETERBORO'.	Smith	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lakefield	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Peterborough	14	17	17	1	9	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Monaghan	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ennismore	2	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
SOUTH PERTH.	South Easthope	1	.....	.....	.....	6	7	6	395 00	405 00	405 00	221 48	231 05	223 06	
	Fullarton	.....	1	.....	.....	3	3	3	180 00	180 00	215 00	100 92	102 70	118 42	
	Mitchell	.....	1	.....	.....	9	9	10	970 00	980 00	925 00	622 95	646 38	590 40	
	Hibbert	.....	...	.....	.....	8	8	8	500 00	510 00	490 00	280 33	290 95	269 88	
	Downie	1	1	.....	.....	7	8	7	460 00	505 00	400 00	257 92	288 08	220 30	
	St. Mary's	.....	1	.....	.....	13	13	13	1880 84	1855 00	1812 50	1410 40	1373 94	1396 89	
	Blanchard	.....	1	.....	.....	5	6	7	330 00	370 00	365 00	185 05	211 08	201 04	
EAST PETERBORO'.	Ashburuham	.....	.....	.....	1	6	5	6	480 00	400 00	405 00	265 72	226 90	227 00	
	Asphodel	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	24 28	25 38	24 98	
	Dummer	.....	1	.....	.....	2	2	3	120 00	160 00	125 00	48 57	67 67	52 05	
	Otonabee	.....	.....	.....	.....	4	5	4	240 00	300 00	210 00	97 16	126 90	87 44	
	Burleigh, Anstruther and Chandos	.....	3	.....	.....	4	4	7	240 00	230 00	225 00	97 16	97 28	93 68	
	Norwood	.....	.....	.....	.....	3	3	4	180 00	180 00	300 00	72 87	76 14	159 92	
	Belmont and Methuen	.....	.....	.....	.....	1	1	2	60 00	60 00	120 00	24 28	25 38	49 96	
	Douro	.....	.....	.....	.....	1	2	2	60 00	120 00	140 00	24 28	50 76	58 30	
WEST PETERBORO'.	Smith	.....	.....	.....	.....	3	3	3	180 00	180 00	205 00	95 15	101 69	116 59	
	Lakefield	.....	1	.....	.....	5	4	5	375 00	300 00	305 00	233 59	195 59	199 34	
	Peterborough	.....	3	.....	.....	22	26	30	4060 00	4160 00	4515 00	3183 27	3255 00	3473 16	
	North Monaghan	.....	.....	.....	.....	.....	1	1	20 00	60 00	60 00	10 57	33 89	34 12	
	Ennismore	.....	.....	.....	.....	3	2	2	200 00	160 00	180 00	105 73	90 39	102 37	

SCHEDULE C.—Comparative Statement by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
PRESCOTT.	South Plantagenet	4	3	6	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Hawkesbury	5	4	5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Longueuil	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Plantagenet	3	3	5	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Caledonia	3	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Alfred	2	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	West Hawkesbury	5	4	4	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hawkesbury, Village	3	2	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	L'Original	2	3	3	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PRINCE EDWARD.	Picton	5	6	6	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	South Marysburgh	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wellington	3	3	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Sophiasburgh	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hillier	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	North Marysburgh	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ameliasburgh	5	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Hallowell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH RENFREW.	Bromley	1	3	2	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Pembroke	8	8	9	2	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ross	2	1	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Westmeath	5	5	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wilberforce	1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Head, Maria and Clara	1	3	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Petawawa	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
PRESCOTT.	South Plantagenet	.....	.....	.....	.....	5	4	6	320 00	240 00	380 00	165 23	121 95	205 49	
	East Hawkesbury	.....	.....	.....	.....	5	7	6	300 00	420 00	360 00	154 92	213 38	195 63	
	Longueuil	.....	.....	.....	.....	1	1	2	60 00	60 00	120 00	30 98	30 49	65 21	
	North Plantagenet	.....	.....	.....	.....	5	4	7	340 00	260 00	440 00	175 58	132 10	239 10	
	Caledonia	.....	.....	.....	.....	3	4	4	200 00	240 00	240 00	103 28	121 94	130 41	
	Alfred	.....	.....	.....	.....	2	2	4	120 00	120 00	260 00	61 97	60 96	141 29	
	West Hawkesbury	.....	.....	.....	.....	6	5	5	600 00	490 00	500 00	425 89	342 40	363 02	
	Hawkesbury, Village	.....	.....	.....	.....	4	2	3	400 00	200 00	300 00	283 93	140 96	217 81	
	L'Orignal	.....	.....	.....	.....	3	4	4	270 00	320 00	320 00	182 94	201 94	210 41	
PRINCE EDWARD.	Picton	.....	1	.....	.....	7	8	9	1190 00	1500 87	1425 00	830 47	974 48	938 81	
	South Marysburgh	.....	1	.....	.....	3	3	4	240 00	240 00	325 00	132 15	127 31	142 35	
	Wellington	.....	.....	.....	.....	3	4	3	345 00	468 25	290 00	237 15	295 57	188 83	
	Sophiasburgh	.....	.....	.....	.....	3	3	3	180 00	180 00	200 00	72 15	67 31	87 58	
	Hillier	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	72 15	67 31	78 83	
	North Marysburgh	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	24 05	.....	.....	
	Ameliasburgh	.....	3	.....	.....	5	6	11	300 00	360 00	505 00	120 23	134 64	221 17	
	Hallowell	.....	.....	.....	.....	.....	.....	.....	20 00	.....	40 00	8 02	.....	17 52	
NORTH RENFREW.	Bromley	.....	.....	.....	.....	3	5	4	190 00	300 00	260 00	100 35	168 13	136 79	
	Pembroke	.....	.....	.....	.....	14	13	14	1630 00	1675 00	1810 00	1077 83	1136 52	1151 21	
	Ross	.....	.....	.....	.....	3	2	2	180 00	120 00	120 00	95 05	67 25	63 14	
	Westmeath	.....	.....	.....	.....	6	5	5	410 00	300 00	325 00	216 52	168 13	171 01	
	Wilberforce	.....	.....	.....	.....	1	2	3	80 00	145 00	180 00	42 26	81 26	94 71	
	Head, Maria and Clara	.....	.....	.....	.....	1	6	1	80 00	550 00	140 00	42 25	308 23	73 66	
	Petawawa	.....	.....	.....	.....	.....	.....	.....	.....	.....	70 00	.....	.....	36 83	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary.			Tavern. Beer and Wine.	Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
SOUTH RENFREW.	McNab	2	2	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Renfrew	5	5	5	.....	3	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Grattan	2	3	3	.....	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brougham	.....	.....	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brudenell	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Arnprior	6	6	6	.....	2	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Radcliffe and Raglan	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hagarty, Sherwood & Jones	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Griffith and Matawatchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RUSSELL.	Cambridge	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Russell	5	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clarence	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Gloucester	10	9	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Cumberland	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Osgoode	5	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Edinburgh	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
EAST SIMCOE.	Tiny	2	3	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Orillia and Matchedash	3	3	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Oro	5	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Tay	2	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Medonte	8	9	9	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Penetanguishene	3	3	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Orillia, Town	7	6	6	.....	.....	.....	.....	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	Midland	4	4	4	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
SOUTH RENFREW.	McNab					2	2	5	140 00	120 00	260 00	62 92	63 29	137 99	
	Renfrew					8	9	9	600 00	675 00	675 00	335 79	419 43	421 60	
	Grattan					4	5	5	280 00	300 00	300 00	125 89	158 01	159 22	
	Brougham						1	3		80 00	180 00		42 14	95 54	
	Brudenell					2	2	3	120 00	120 00	180 00	53 96	63 19	95 54	
	Armprior					8	9	9	480 00	540 00	485 00	215 83	284 33	257 41	
	Radcliffe and Raglan		1			1	2	2	60 00	120 00	120 00	26 97	63 19	63 69	
	Hagarty, Sherwood & Jones									40 00	20 00		21 07	10 61	
	Griffith and Matawatchan														
RUSSELL.	Cambridge		1				1	3	20 00	60 00	205 00	8 83	28 36	105 38	
	Russell					5	5	5	360 00	329 00	300 00	132 56	155 50	152 72	
	Clarence		2			4	4	6	240 00	240 00	370 00	106 08	113 44	158 37	
	Gloucester					10	9	9	680 00	630 00	642 00	300 48	297 77	326 84	
	Cumberland					3	3	3	180 00	180 00	210 00	79 55	85 68	106 91	
	Osgoode					5	4	4	325 00	260 00	372 00	143 61	122 80	189 39	
	New Edinburgh							1			68 00			44 29	
EAST SIMCOE.	Tiny					3	4	5	200 00	260 00	265 00	102 97	138 34	138 87	
	Orillia and Matchedash		1			4	3	4	240 00	300 00	185 00	123 57	106 41	96 93	
	Oro					5	5	5	300 00	360 00	350 00	154 46	159 02	157 67	
	Tay					2	3	3	120 00	180 00	180 00	64 78	95 77	94 32	
	Medonte					9	10	10	540 00	620 00	620 00	278 05	329 88	324 86	
	Penetanguishene					4	4	5	350 00	575 00	400 00	268 86	262 70	275 85	
	Orillia, Town		1			8	7	8	1200 00	1203 50	1065 00	535 56	783 73	752 73	
	Midland					5	5	5	300 00	577 50	400 00	154 46	220 74	257 22	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
SOUTH SIMCOE.	Essa	8	9	9															
	Innisfil	7	9	9															
	West Gwillimbury	3	4	4	1	1	1												
	Tossorontio	5	5	5															
	Alliston	4	5	5	2	2	2												
	Bradford	4	4	4	1	3	2												
WEST SIMCOE.	Barrie	12	12	12	4	4	4												
	Nottawasaga	17	16	14	2	2	2												
	Stayner	4	4	4	2	2	2												
	Collingwood, Town	9	9	8	2	2	2												
	Vespra	4	4	3	1														
	Sunnidale	4	4	4															
	Flos	4	5	5			1				1								
STORMONT.	Osnabruck	12	11	10															
	Finch	4	3	4		2	2												
	Roxborough																		
THUNDER BAY.	Shuniah	13	9	8	2	2	1	1	1	1								2	
	Neebing			3	1	1	2	1	1										
	Unorganized Territory																		

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed. Transfers. 1880-1.	Transfers. 1881-2.	Removals. 1880-1.	Removals. 1881-2.	Total. 1879-80.	Total. 1880-1.	Total. 1881-2.	Amounts received for Licenses, Transfers, Removals and Fines in each Municipality. 1879-80.	1880-1.	1881-2.	Amounts paid to Municipalities. 1879-80.	1880-1.	1881-2.	Remarks.
									$ c.	$ c.	$ c.	$ c.	c.	$ c.	
SOUTH SIMCOE.	Essa	....	....	....	....	8	9	9	500 00	540 00	560 00	254 70	286 93	286 36	
	Innisfil	....	....	....	....	7	9	9	470 00	540 00	540 00	239 40	286 93	276 13	
	West Gwillimbury	....	....	....	....	4	5	5	280 00	350 00	320 00	142 62	185 98	163 63	
	Tossorontio	....	2	....	....	5	5	7	300 00	300 00	310 00	152 82	159 40	158 52	
	Alliston	....	1	....	....	6	7	8	540 00	660 00	585 00	363 36	425 66	377 34	
	Bradford	....	3	....	....	5	7	9	380 00	580 00	495 00	232 82	383 17	311 76	
WEST SIMCOE.	Barrie	....	3	....	....	16	16	19	2120 00	2000 00	2015 00	1566 62	1448 95	1447 97	
	Nottawasaga	....	....	....	....	19	18	16	1140 00	1120 00	960 00	654 68	637 84	540 47	
	Stayner	....	1	....	....	6	6	7	542 00	540 00	565 00	379 37	376 40	384 65	
	Collingwood, Town	....	....	....	....	10	11	10	1220 00	1320 00	1200 00	870 92	941 16	840 40	
	Vespra	....	....	....	....	4	3	3	240 00	180 00	180 00	137 83	102 52	101 34	
	Sunnidale	....	....	....	....	4	4	4	240 00	240 00	240 00	137 84	136 68	135 12	
	Flos	....	....	....	....	5	5	6	255 00	300 00	380 00	146 45	170 86	212 44	
STORMONT.	Osnabruck	....	4	....	....	12	11	14	745 00	660 00	775 00	291 88	253 38	313 87	
	Finch	....	....	....	....	4	5	6	260 00	340 00	380 00	101 86	130 52	151 36	
	Roxborough	....	....	....	....	....	....	....	47 20	50 78	67 00	1 15	3 27	27 14	Dunkin Act in force. Am'ts received 1879-80-1 were in respect of expenses.
THUNDER BAY.	Shuniah	....	1	....	....	16	14	12	2460 00	1970 00	1195 00	1959 47	1542 28	852 94	
	Neebing	....	2	....	....	....	....	7	....	....	610 00	....	....	467 67	
	Unorganized Territory	....	....	....	....	1	1	1	60 00	60 00	60 00	....	....	....	Payable to Province, less proportion of expenses.

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.				Wholesale.				Extended Tavern.				Extended Shop.				Six Months.			
		Ordinary.			Beer and Wine.																				
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.		1879-80.	1880-1.	1881-2.	
TORONTO.	Toronto, City	195	204	209	1	98	94	95		19	18	15	1 Extended Wholesale.		1	2		.. ..	....	....			1	1	
NORTH VICTORIA AND HALIBURTON.	Eldon	12	11	11	....	1	....	....		....	....	....		....	....	....		....	....	....		....	....	1	
	Fenelon	6	5	6	1	....	....	....		....	....	....		....	....	....		....	....	....		....	1	....	
	Fenelon Falls	2	2	2	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Bexley	1	1	2	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Laxton and Digby	1	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Somerville	3	3	3	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Anson	1	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Minden	2	2	2	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Snowdon	1	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Dysart	2	2	1	....	1	1	1		....	....	....		....	....	....		....	....	....		....	....	....	
	Glamorgan	....	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Sherborne	....	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Dalton	....	....	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Stanhope	....	....	....	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
SOUTH VICTORIA.	Lindsay, Town	13	13	14	....	2	2	2		....	....	....		....	....	....		....	....	....		....	....	....	
	Mariposa	6	6	6	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Emily	2	....	....	....	....	....	....		....	....	....		....	2	....		....	....	....		....	....	....	
	Verulam	1	1	1	....	....	....	....		....	....	....		....	....	....		....	....	....		....	....	....	
	Bobcaygeon	3	3	3	....	1	1	1		....	....	....		....	....	....		....	....	....		....	....	....	
	Omemee	4	4	4	....	1	1	1		....	....	....		....	....	....		....	....	....		....	....	....	

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
TORONTO.	Toronto, City	.....	... ..	.. ...	.....	312	318	324	49300 00	50552 50	49427 50	34001 07	34980 10	35407 45	
NORTH VICTORIA AND HALIBURTON.	Eldon	.....	.....	.....	....	13	11	11	818 00	680 00	660 00	400 05	312 40	313 11	
	Fenelon	.....	.....	.....	.....	6	7	7	400 00	390 00	360 00	194 50	189 64	174 66	
	Fenelon Falls	.....	.....	.....	.....	2	2	2	200 00	200 00	200 00	138 35	138 35	138 22	
	Bexley	.....	.....	.....	....	1	1	2	90 00	60 00	120 00	44 00	27 57	56 94	
	Laxton and Digby	.....	.....	.....	.....	1	1	1	67 00	60 00	60 00	32 77	27 56	28 46	
	Somerville	.....	.....	.....	. ...	3	3	3	206 00	191 00	180 00	100 25	87 75	85 40	
	Anson	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	29 34	27 56	28 46	
	Minden	.....	.....	.....	.....	2	2	2	120 00	120 00	120 00	58 68	55 13	56 94	
	Snowdon	.....	.....	.. ...	.....	1	1	1	60 00	60 00	60 00	29 34	27 56	28 47	
	Dysart	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	88 02	82 69	85 40	
	Glamorgan	.....	.....	.....	.. ..	.....	1	1	.....	60 00	60 00	.....	27 56	28 46	
	Sherborne	.....	.....	.....	.....	.....	1	1	.....	120 00	60 00	.....	55 13	28 46	
	Dalton	.....	.....	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	28 46	
	Stanhope	.....	.....	.....	.....	.. ..	.....	.....	.....	.....	.....	.. ....	.....	.. ..	Dunkin Act in force.
SOUTH VICTORIA.	Lindsay, Town	2	3	.....	.....	15	17	19	2550 00	2410 00	2621 00	1856 42	1788 28	1930 60	
	Mariposa	....	2	.....	.....	6	6	8	360 00	360 00	400 00	176 05	175 04	194 06	
	Emily	.....	.....	.. ...	.....	2	2	.....	120 00	160 00	.....	58 35	77 80	.....	
	Verulam	.....	.....	.....	.....	1	1	1	60 00	60 00	60 00	29 18	29 17	29 11	
	Bobcaygeon	1	....	.....	.....	4	5	3	340 00	345 00	300 00	216 70	219 14	207 32	
	Omemee	.....	1	....	.....	5	5	6	660 00	660 00	665 00	505 87	505 88	507 98	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.				Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Wine and Beer.															
		1879-80.	1880-1.	1879-80.	1880-1.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.[E]	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
NORTH WATERLOO.	Waterloo, T'nship, N. part.	7	7	7	.....	....	.....	....	.....	.....	.....	.. .	.....	....	....	.....	....	....	.....	.....
	Woolwich	11	11	11	.....	1	1	1	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Wellesley	14	13	14	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Berlin	8	8	8	.....	6	6	6	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waterloo, Town	6	6	6	....	1	1	1	....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	...
SOUTH WATERLOO.	Galt	8	8	8	.....	3	3	4	.....	.....	.....	.....	. .	...	.....	.....	.....	.....	...	.....
	Preston	5	5	5	.....	1	1	.....	....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	...
	Wilmot	14	13	13	.....	1	1	1	.. ..	.....	...	1	...	.....	.....	.....	.....	.....	.....	.....
	Waterloo, T'nship, S. part.	5	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hespeler	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Dumfries	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Hamburgh	4	4	4	.....	2	2	2	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WELLAND.	Niagara Falls (f'mly Clifton)	10	10	10	.....	7	9	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Crowland	3	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Chippewa	4	4	4	.....	2	2	1	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	. .	.....
	Fort Erie	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Port Colborne	7	7	7	.....	3	5	3	.. ..	.....	...	.....	.....	.....	.....	.....	.....	1	.....	1
	Humberstone	12	12	10	.....	2	2	1	.. ..	.....	...	.....	.....	.....	.....	.....	.....	1	1	.....
	Stamford	8	8	7	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Thorold, Township	9	7	7	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Thorold, Town	9	8	6	....	2	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
	Welland	8	8	8	.....	4	4	2	.....	.....	.....	.....	.....	1	.....	.....	1	1	1	1
	Willoughby	4	2	1	..	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Bertie	12	13	12	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH WATERLOO.	Waterloo, T'nship, N. part	....	.....	.....	.....	7	7	7	480 00	420 00	460 00	274 75	236 34	262 41	
	Woolwich	.....	1	.....	.....	12	12	13	820 00	825 00	845 00	469 30	464 25	482 05	
	Wellesley	.....	3	.....	.....	14	13	18	990 00	820 00	975 00	565 68	461 44	556 20	
	Berlin	.....	2	.....	.....	14	14	16	1325 00	1300 00	1350 00	826 80	801 51	838 83	
	Waterloo, Town	.....	.....	.....	.....	7	7	7	720 00	720 00	720 00	463 43	457 66	462 27	
SOUTH WATERLOO.	Galt	.....	.....	.....	.....	11	11	12	1350 00	1370 00	1600 00	949 09	968 55	1116 84	
	Preston	.....	.....	.....	.....	6	6	5	480 00	480 00	400 00	315 99	319 41	265 78	
	Wilmot	.....	.....	.....	.....	16	14	14	935 00	900 00	840 00	509 05	498 55	464 20	
	Waterloo, Tn'ship, S. part	.....	.....	.....	....	5	5	5	300 00	300 00	300 00	163 33	166 18	165 78	
	Hespeler	.....	.....	.....	.....	3	3	3	180 00	180 00	180 00	98 00	99 72	99 48	
	North Dumfries	.....	.....	.....	.....	4	4	4	348 00	400 00	340 00	225 90	257 27	223 67	
	New Hamburgh	.....	.....	.....	.....	6	6	6	460 00	520 00	440 00	250 43	288 15	278 94	
WELLAND.	Niagara Falls (f'mly Clifton)	.....	.....	.....	.....	18	20	17	1420 00	1660 00	1410 00	844 34	979 54	781 48	
	Crowland	.....	.....	.....	.....	3	2	3	180 00	140 00	200 00	107 02	82 59	110 84	
	Chippewa	.....	1	.....	.....	6	6	6	360 00	360 00	305 00	214 06	212 42	169 56	
	Fort Erie	.....	.....	.....	.....	4	3	3	350 00	215 00	220 00	240 54	133 02	128 62	
	Port Colborne	.....	3	.....	.....	11	12	14	1135 00	1240 00	1009 00	790 41	848 51	679 61	
	Humberstone	.....	3	.....	.....	15	15	14	955 00	950 00	745 00	567 86	560 56	412 90	
	Stamford	.....	3	.....	.....	9	9	11	610 00	600 00	540 00	362 70	354 02	299 28	
	Thorold, Township	.....	2	.....	.....	11	8	10	700 00	533 20	490 00	416 24	314 60	271 57	
	Thorold, Town	.....	1	.....	.....	12	12	10	1240 00	1113 00	955 00	867 04	706 17	640 73	
	Welland	.....	.....	.....	.....	13	13	13	1300 00	1436 00	1072 50	878 39	949 82	653 45	
	Willoughby	.....	.....	.....	.....	4	2	2	240 00	140 00	75 00	142 70	82 59	41 56	
	Bertie	.....	6	.....	.....	15	16	20	1195 00	1312 00	1280 00	830 16	898 47	834 21	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern.			Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.		Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
CENTRE WELLINGTON.	Pilkington	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Elora	5	5	5	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....
	Nichol	6	7	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Fergus	6	6	6	4	3	3	....	....	....	....	....	....	....	....	....	....	....	....
	Luther	3	3	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	West Garafraxa	4	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Erin, Township	9	9	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	East Luther	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	West Luther	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Erin, Village	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SOUTH WELLING-TON.	Eramosa	9	10	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Guelph, Township	4	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Puslinch	7	7	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Guelph, City	19	19	18	10	10	8	....	....	....	....	....	....	....	....	....	....	....	....
WEST WELLINGTON.	Mount Forest	6	7	8	....	....	....	5	5	4	....	....	....	....	....	....	....	....	....
	Clifford	4	4	4	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....
	Arthur, Village	6	6	6	....	....	....	1	2	2	....	....	....	....	....	....	....	....	....
	Harriston	4	5	5	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....
	Drayton	4	6	8	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....
	Palmerston	5	6	8	....	1	1	....	1	1	....	....	....	....	....	....	....	....	....
	Arthur, Township	3	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Maryborough	8	8	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minto	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Peel	9	8	9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed. Transfers. 1880-1.	Transfers. 1881-2.	Removals. 1880-1.	Removals. 1881-2.	Total. 1879-80.	Total. 1880-1.	Total. 1881-2.	Amounts received for Licenses, Transfers, Removals and Fines in each Municipality. 1879-80.	1880-1.	1881-2.	Amounts paid to Municipalities. 1879-80.	1880-1.	1881-2.	Remarks.
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
CENTRE WELLINGTON.	Pilkington		1			2	2	3	120 00	120 00	125 00	64 40	61 73	67 76	
	Elora					8	8	8	640 00	705 00	670 00	417 60	440 40	436 48	
	Nichol					6	7	7	360 00	460 00	420 00	193 20	236 65	227 68	
	Fergus					10	9	9	810 00	735 00	660 00	490 30	446 69	412 81	
	Luther					3	3		180 00	222 00		96 60	114 21		
	West Garafraxa		2			4	4	6	285 00	295 00	250 00	152 94	153 43	135 53	
	Erin, Township		3			9	9	10	595 00	550 00	455 00	319 31	282 97	246 64	
	East Luther		1					3			125 00			67 76	
	West Luther		1					2			65 00			35 23	
	Erin, Village							3			205 00			111 14	
SOUTH WELLINGTON.	Eramosa					9	10	10	540 00	600 00	620 00	313 89	352 36	363 96	
	Guelph, Township		1			4	4	5	260 00	240 00	245 00	151 14	140 94	143 82	
	Puslinch		1			5	7	8	330 00	420 00	425 00	191 83	246 65	249 48	
	Guelph, City					29	29	26	5180 00	4450 40	4590 00	3898 31	3304 88	3499 68	
WEST WELLINGTON.	Mount Forest		2			11	12	14	1430 00	1520 00	1522 00	1116 51	1100 18	1112 78	
	Clifford		2			5	5	7	380 00	400 00	340 00	248 46	262 92	210 82	
	Arthur, Village					7	8	8	720 00	1020 00	1000 00	527 09	762 98	758 32	
	Harriston		2			5	6	8	500 00	620 00	610 00	324 62	405 81	405 81	
	Drayton		1			4	4	7	280 00	300 00	445 00	174 77	188 62	292 90	
	Palmerston		1			6	7	10	600 00	790 00	955 00	389 61	532 97	652 89	
	Arthur, Township		1			3	3	4	180 00	180 00	185 00	101 07	102 89	107 91	
	Maryborough		1			8	8	9	480 00	480 00	485 00	269 55	274 37	282 90	
	Minto					2	2	2	120 00	120 00	120 00	67 38	68 59	70 00	
	Peel		1			9	8	10	580 00	500 00	565 00	325 72	285 81	329 57	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the number of Licenses, etc.—*Continued.*

License District.	Municipality.	Tavern. Ordinary. 1879-80.	Tavern. Ordinary. 1880-1.	Tavern. Ordinary. 1881-2.	Tavern. Beer and Wine. 1881-2.	Shop. 1879-80.	Shop. 1880-1.	Shop. 1881-2.	Wholesale. 1879-80.	Wholesale. 1880-1.	Wholesale. 1881-2.	Extended Tavern. 1879-80.	Extended Tavern. 1880-1.	Extended Tavern. 1881-2.	Extended Shop. 1879-80.	Extended Shop. 1880-1.	Extended Shop. 1881-2.	Six Months. 1879-80.	Six Months. 1880-1.	Six Months. 1881-2.
NORTH WEST. WORTH.	Dundas	9	9	9	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....
	Beverley	7	5	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	West Flamborough	10	9	6	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Flamborough	6	6	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waterdown	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	E. or W. Flamborough	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SOUTH WEST. WORTH.	Binbrook	3	3	3	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Ancaster	4	5	5	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Saltfleet	9	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Barton	9	7	4	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....
	Glanford	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
EAST YORK.	Scarborough	5	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Markham, Township	12	8	11	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	York, East of Yonge Street	15	16	17	.....	3	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Markham, Village	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Yorkville	6	7	7	.....	2	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH YORK.	Aurora	3	3	3	.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	Holland Landing	2	2	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Gwillimbury	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	King	11	11	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Gwillimbury	4	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Whitchurch	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newmarket	5	6	6	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Georgina	3	3	4	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Stouffville	3	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Continued.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals, and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
NORTH WEST. WORTH.	Dundas	.....	4	.....	.....	13	13	17	1600 00	1580 00	1580 00	1069 59	1048 00	1069 81	
	Beverley	.....	2	.....	.....	7	5	9	520 00	380 00	440 00	264 66	189 30	235 01	
	West Flamborough	.....	3	.....	.....	10	9	12	630 00	540 00	565 00	320 58	268 99	300 02	
	East Flamborough	.....	1	.....	.....	6	6	6	380 00	360 06	235 00	193 38	179 33	132 28	
	Waterdown	.....	.. ..	.....	.....	3	3	3	300 00	300 00	300 00	211 59	209 66	213 13	
	E. or W. Flamborough	.....	.. ..	.....	.....	.....	.....	1	.....	.....	60 00	.....	.....	31 05	The question of right to this amount depends on the determination of a disputed boundary between the municipalities concerned.
SOUTH WEST. WORTH.	Binbrook	.....	1	.....	.....	3	3	4	180 00	180 00	205 00	84 43	81 60	86 29	
	Ancaster	.....	2	.....	.....	6	7	9	420 00	536 00	470 00	207 74	253 94	209 44	
	Saltfleet	.....	1	.....	.....	9	6	7	600 00	400 00	405 00	281 65	181 33	170 46	
	Barton	.....	2	.....	.....	9	8	7	660 00	541 00	265 00	369 75	245 26	111 54	
	Glanford	.....	.....	.....	.....	3	3	3	180 00	206 00	230 00	84 43	93 39	96 81	
EAST. YORK.	Scarborough	.....	.....	.....	.....	5	5	6	600 00	620 00	760 00	455 50	466 35	568 08	
	Markham, Township	.....	.....	.....	.....	12	9	11	700 00	970 00	1120 00	362 84	662 70	793 75	
	York, East of Yonge Street	.....	5	.....	.....	18	20	26	1130 00	1600 00	1785 00	585 70	1023 77	1130 07	
	Markham, Village	.....	.....	.....	.....	3	3	3	322 50	320 00	300 00	206 89	223 98	213 64	
	Yorkville	.....	3	.....	.....	8	8	12	1145 40	1150 00	1295 00	885 31	899 52	1028 72	
NORTH YORK.	Aurora	.....	1	.....	.....	4	5	6	311 68	381 25	430 00	201 57	248 45	292 76	
	Holland Landing	.. ..	.....	.....	.....	2	3	3	150 00	200 00	180 00	74 92	103 44	99 00	
	North Gwillimbury	.....	1	.....	.....	3	3	4	195 00	180 00	185 00	97 40	93 08	101 75	
	King	.....	2	.....	.....	11	11	14	1038 37	1140 00	1255 00	720 56	801 98	906 26	
	East Gwillimbury	.....	.....	.....	.....	4	5	5	260 00	300 00	300 00	129 87	155 16	165 00	
	Whitchurch	.....	1	.....	.....	3	3	4	165 00	240 00	205 00	82 41	124 12	112 75	
	Newmarket	1	3	1	.....	9	12	14	912 04	1040 00	1086 25	609 26	706 93	683 52	
	Georgina	.....	2	.....	.....	4	4	7	240 00	280 00	310 00	119 88	144 81	170 51	
	Stouffville	.....	.....	.....	.....	3	3	3	220 04	240 00	240 00	137 45	153 08	139 00	

SCHEDULE C.—Comparative Statement, by Municipalities, shewing the Number of Licenses, etc.—*Concluded.*

License Districts.	Municipality.	Tavern.				Shop.			Wholesale.			Extended Tavern.			Extended Shop.			Six Months.		
		Ordinary.			Beer and Wine.															
		1879-80.	1880-1.	1881-2.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.
WEST YORK.	York, West of Yonge St.	16	15	19	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vaughan	12	13	14	.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Etobicoke	5	5	5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Richmond Hill	3	3	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Parkdale	2	2	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brockton	1	1	3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SCHEDULE C.—*Concluded.*

License District.	Municipality.	Licenses Transferred and Removed.				Total.			Amounts received for Licenses, Transfers, Removals and Fines in each Municipality.			Amounts paid to Municipalities.			Remarks.
		Transfers.		Removals.											
		1880-1.	1881-2.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	1879-80.	1880-1.	1881-2.	
									$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	
WEST YORK.	York, West of Yonge St.	.....	.....	.....	.....	17	16	17	1125 00	1325 00	1360 00	529 02	821 20	910 13	
	Vaughan	.....	.....	.....	.....	14	15	16	795 00	1600 00	1640 00	373 80	1098 71	1198 95	
	Etobicoke	.....	.....	.....	.....	5	5	6	345 00	330 00	360 00	162 21	164 57	201 23	
	Richmond Hill	.....	1	.....	.....	2	3	4	183 34	450 00	495 00	125 05	359 76	395 78	
	Parkdale	.....	1	.....	.....	2	3	4	110 00	450 00	455 00	51 72	359 76	373 41	
	Brockton	.....	.....	.....	.....	.....	1	5	.....	80 00	400 00	.....	49 91	267 69	

SCHEDULE D.

COMPARATIVE STATEMENT of the amount of Fines collected, and of the amounts paid in respect of expenses of Commissioners and Salaries of Inspectors, in each License District, for the License years 1880-1 and 1881-2, respectively.

LICENSE DISTRICT.	Fines Collected.		Paid in respect of Expenses of Commissioners and Salaries of Inspectors.		Remarks.
	1880-1.	1881-2.	1880-1.	1881-2.	
	$ c.	$ c.	$ c.	$ c.	
Addington	255 75	240 00	548 75	569 00	
Algoma	40 00	120 00	254 48	299 33	
Brant, North	20 00	120 00	440 21	424 96	
Brant, South	240 00	315 00	665 94	747 74	
Brockville and South Leeds	170 04	565 00	744 50	722 20	
Bruce, North	180 00	139 00	473 00	467 00	
Bruce, South	440 00	270 00	722 50	736 00	
Cardwell	266 21	220 00	527 20	507 70	
Carleton			325 80	512 83	
Cornwall	165 00	190 00	442 46	437 46	
Dufferin	160 00	160 00	484 40	486 00	
Dundas	40 00	100 00	483 20	474 40	
Durham, East	40 00	40 00	463 15	463 15	
Durham, West	124 00	125 00	457 50	459 00	
Elgin	295 00	350 00	600 00	615 45	
Essex, North	100 00	140 00	565 56	549 96	
Essex, South	315 00	145 00	408 66	415 56	
Frontenac	170 00	118 15	506 60	504 00	
Glengarry	180 00	190 00	518 98	510 30	
Grey, East	80 00	171 00	450 00	486 50	
Grey, North	180 00	160 00	499 92	500 00	
Grey, South		120 00	430 00	450 00	
Haldimand	230 00	110 00	486 20	486 50	
Halton	70 00	40 00	515 92	514 22	
Hamilton	960 00	659 00	900 00	900 00	
Hastings, East	100 00	38 00	515 00	516 00	
Hastings, North	60 00	60 00	433 00	528 00	
Hastings, West	260 00	240 00	493 81	603 50	
Huron, East	61 00	50 00	571 92	584 00	
Huron, South	100 00	160 00	546 87	541 00	
Huron, West	185 52	140 00	577 94	578 12	
Kent, East	165 00	120 00	510 00	494 09	
Kent, West	191 00	96 62	563 92	558 92	
Kingston	300 00	450 00	799 92	799 92	
Lambton, East	220 00	100 00	455 75	458 10	
Lambton, West	40 00	98 70	453 00	457 30	
Lanark, North	20 00	205 00	453 90	458 55	
Lanark, South	80 00	40 00	460 50	450 00	
Leeds and Grenville, North, and South Grenville	80 00	180 00	588 96	588 96	
Lennox	60 00	223 55	450 00	450 00	
Lincoln	280 00	40 00	799 94	805 96	
London	1010 00	1091 55	800 00	800 00	
Middlesex, East	520 00	594 00	734 49	589 56	
Middlesex, North	60 00	140 00	520 68	523 93	
Middlesex, West	140 00	60 00	577 44	580 02	
Monck	60 00	110 00	460 00	508 45	
Muskoka and Parry Sound	100 00	159 87	477 85	514 50	
Nipissing		420 00	20 00	50 00	
Norfolk	290 00	185 00	636 50	682 55	
Northumberland, East	85 80	20 00	556 92	535 68	
Northumberland, West	268 00	290 00	455 00	465 00	
Ontario, North	140 00	330 00	606 50	668 45	
Ontario, South	265 00	125 00	522 00	516 00	
Ottawa	414 00	200 00	1023 96	999 96	
Oxford, North	160 00	160 00	512 87	517 92	
Oxford, South	370 00	190 00	533 82	533 98	

SCHEDULE D.

COMPARATIVE STATEMENT of amount of Fines, etc., in each License District for the License years 1880-1 and 1881-2 respectively.—*Continued.*

LICENSE DISTRICT.	Fines Collected.		Paid in respect of Expenses of Commissioners and Salaries of Inspectors.		Remarks.
	1880-1.	1881-2.	1880-1.	1881-2.	
	$ c.	$ c.	$ c.	$ c.	
Peel	60 00	40 00	504 00	506 00	
Perth, North	65 00	240 00	563 36	549 96	
Perth, South	320 00	220 00	520 92	547 42	
Peterborough, East	60 00	20 00	490 00	515 00	
Peterborough, West	40 00	325 00	400 00	403 98	
Prescott	20 00	60 00	450 00	450 00	
Prince Edward	266 62	400 00	499 92	572 92	
Renfrew, North	400 00	495 00	399 96	399 96	
Renfrew, South	60 00	40 00	426 55	417 00	
Russell	139 00	480 00	450 00	483 05	
Simcoe, East	195 50	120 00	543 80	535 60	
Simcoe, South	130 00	40 00	507 00	486 00	
Simcoe, West	60 00	60 00	530 53	542 59	
Stormont	40 00	242 00	460 73	468 96	
Thunder Bay	20 00	20 00	177 75	171 00	
Toronto	2990 00	1290 00	2483 33	2450 00	
Victoria, North, and Haliburton	94 00	.....	450 00	450 00	
Victoria, South	140 00	50 00	600 00	605 60	
Waterloo, North	205 00	320 00	492 50	504 00	
Waterloo, South	320 00	140 00	511 97	534 77	
Welland	877 20	554 00	595 05	603 00	
Wellington, Centre	307 00	75 00	488 50	483 55	
Wellington, South	100 40	60 00	450 00	450 00	
Wellington, West	260 00	132 00	568 99	583 54	
Wentworth, North	100 00	240 00	502 00	492 00	
Wentworth, South	268 00	150 00	510 00	502 00	
York, East	185 00	140 00	524 69	520 49	
York, North	260 00	125 00	507 20	500 00	
York, West	175 00	80 00	528 42	470 40	
Totals	18057 00	17301 44	46449 96	46796 40	

SCHEDULE E.

Comparative Statement, shewing the number of Prisoners committed to the County Gaols for drunkenness, during the years 1876, 1877, 1878, 1879, 1880, 1881 and 1882.

COUNTY.	1876.	1877.	1878.	1879.	1880.	1881.	1882.
Algoma	8	4	4	24	19	17	24
Brant	97	84	75	63	81	64	80
Bruce	1	2	17	8	2	14	4
Carleton	387	319	283	272	222	269	265
Dufferin						1	
Elgin	31	41	47	54	53	45	61
Essex	87	55	60	59	71	51	91
Frontenac	143	137	139	126	102	53	25
Grey	15	13	14	35	40	23	23
Haldimand	7	2	6	10	15	6	4
Halton	21	15	6	1	6	5	4
Hastings	20	13	43	34	16	35	67
Huron	24	29	22	15	22	18	8
Kent	24	20	20	33	24	13	28
Lambton	123	84	142	115	120	77	77
Lanark	7	6	10	8	7	10	4
Leeds and Grenville	84	69	84	71	72	56	67
Lennox and Addington	6	4	5	9	11	14	11
Lincoln	56	98	68	51	44	55	41
Middlesex	155	106	211	193	235	210	242
Muskoka and Parry Sound	2	9	8	6	8	3	13
Nipissing				1	1		2
Norfolk	11	35	21	15	26	14	18
Northumberland and Durham	56	67	38	24	25	20	10
Ontario	10	10	12	11	6	2	5
Oxford	57	39	46	55	54	47	32
Peel	32	45	22	27	14	9	14
Perth	54	75	56	35	39	26	20
Peterborough	5	11	5	5	27	27	38
Prescott and Russell	2	6			1	1	2
Prince Edward	31	29	22	46	75	60	76
Renfrew	2	3	2	5	10	10	24
Simcoe	63	91	133	82	107	62	56
Stormont, Dundas and Glengarry	7	33	18	17	3	4	7
Thunder Bay	78	105	95	81	83	126	88
Victoria and Haliburton	22	32	25	10	7	8	14
Waterloo	13	10	4	28	11	11	10
Welland	69	101	321	188	186	145	50
Wellington	41	36	26	23	40	36	51
Wentworth	259	386	382	382	447	339	396
York	1755	1807	1293	1359	1463	1342	1445
Totals	3868	4032	3785	3581	3795	3328	3497

SCHEDULE F.

STATEMENT of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality and in each License District in the Province during the License Year 1881-2, and shewing:

1. The amount actually paid in each case to the Government.
2. The amount that would have been paid to the Government under the Act of 1868-9, assuming the same number of Licenses to have issued under that Act as were issued in 1881-2.
3. The amount actually paid to each Municipality, *including* any excesses over the Statutory Duties imposed by Municipal By-laws.
4. The amount actually paid to each Municipality, *excluding* any excesses over the Statutory Duties imposed by Municipal By-laws.
5. The amount that would have been paid to the Municipality under the Act of 1868-9, not including any excesses over the Statutory Duties imposed by Municipal By-laws under that Act.

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
ADDINGTON.	Camden	13	1			14	234 06	142 00	468 11	468 11	298 00
	Sheffield	6				6	90 12	60 00	180 24	180 24	120 00
	Newburgh	2				2	30 03	20 00	60 08	60 08	40 00
	Loughborough	4				4	68 84	40 00	137 68	137 68	80 00
	Hinchinbrooke	3	1			4	75 10	42 00	150 20	150 20	98 00
	Portland	5				5	85 12	50 00	170 23	170 23	100 00
	Oso	2				2	30 03	20 00	60 08	60 08	40 00
	Barrie	1				1	15 02	10 00	30 04	30 04	20 00
	Kaladar and Anglesea	2				2	30 03	20 00	60 08	60 08	40 00
	Palmerston & North & South Canonto.	1				1	20 03	10 00	80 05	40 05	20 00
	Bedford	1				1	25 04	10 00	50 06	50 06	20 00
	Denbigh, Abinger, etc.										
	Olden										
	Kennebec										
		40	2			42	703 42	424 00	1,446 85	1,406 85	876 00

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, including any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
ALGOMA.	Sault Ste. Marie	2	1	.....	.....	3	48 46	32 00	251 93	96 93	78 00
	Howland	3	.....	.....	.....	3	53 71	30 00	107 40	107 40	60 00
	Assiginack	2	.....	.....	.....	2	39 30	20 00	98 60	78 60	40 00
	Gordon	2	.....	.....	.....	2	31 43	20 00	62 87	62 87	40 00
	Carnarvon	1	.....	.....	.....	1	15 72	10 00	31 44	31 44	20 00
	Tehkummah	1	.....	.....	.....	1	20 96	10 00	41 92	41 92	20 00
	St. Joseph	1	.....	.....	.....	1	15 72	10 00	31 44	31 44	20 00
	Unorganized Territory	5	1	.....	.....	6	483 34	380 00	.....	.....	280 00
		17	5	.....	.....	22	708 64	532 00	625 90	430 60	278 00
NORTH BRANT.	Paris	7	2	.....	.....	9	188 15	151 00	616 30	376 30	499 00
	South Dumfries	5	.....	.....	.....	5	71 91	50 00	143 80	143 80	100 00
	Brantford Tiship, Northerly portion	4	.....	.....	.....	4	73 10	40 00	146 20	146 20	80 00
	Onondaga	3	.....	.....	.....	3	43 11	30 00	86 29	86 29	60 00
		19	2	.....	.....	21	376 39	271 00	992 59	752 59	649 00
SOUTH BRANT.	Brantford City	21	12	1	.....	34	977 14	584 00	2,406 77	1,954 27	1,856 00
	Brantford Tiship, Southerly portion	6	.....	.....	.....	6	95 56	60 00	190 73	190 73	120 00
	Oakland	3	.....	.....	.....	3	53 56	30 00	107 12	107 12	60 00
	Burford	6	.....	.....	.....	6	107 11	60 00	214 24	214 24	120 00
		36	12	1	.....	49	1,233 17	734 00	2,918 86	2,466 36	2,156 00

BROCKVILLE AND SOUTH LEEDS.	Brockville	15	5		20	554 89	323 00	2,765 04	1,109 79	867 00
	Gananoque	7	2		9	165 70	94 00	1,001 40	331 40	216 00
	Newboro'	3	2		5	88 38	54 00	201 75	176 75	136 00
	Bastard & Burgess	6	1		7	115 99	72 00	231 97	231 97	158 00
	Rear of Yonge and Escott	2	1		3	33 14	20 00	66 29	66 29	40 00
	North Crosby	4			5	88 37	52 00	176 75	176 75	118 00
	South Crosby	4	1		5	66 29	40 00	132 56	132 56	80 00
	Rear of Leeds and Lansdowne	4			5	82 85	52 00	165 70	165 70	118 00
	Elizabethtown	8			8	140 8[illegible]	80 00	281 68	281 68	160 00
	Front of Yonge							2 41	2 41	
	Front of Leeds and Lansdowne					1 20		46 75	46 75	
	Front of Escott					23 37				
		53	12		65	1,361 03	787 00	5,073 30	2,722 05	1,833 00
NORTH BRUCE.	Wiarton	3	1		4	65 88	42 00	131 76	131 76	98 00
	Amabel	2			2	38 16	20 00	76 30	76 30	40 00
	Albemarle	1			1	16 47	10 00	32 94	32 94	20 00
	Arran	5			5	82 36	50 00	164 70	164 70	100 00
	Bruce	3			3	49 41	30 00	98 82	98 82	60 00
	Elderslie	1			1	16 47	10 00	32 94	32 94	20 00
	Port Elgin	4	1		5	87 85	52 00	175 70	175 70	118 00
	Paisley	4	1		5	100 20	52 00	200 40	200 40	118 00
	Southampton	4	1		5	74 12	40 00	148 23	148 23	80 00
	Saugeen	1		1	2	16 47	10 00	32 94	32 94	20 00
	Culverton	3			3	49 41	30 00	113 82	98 82	60 00
	Chesley	3	2		5	82 36	54 00	494 70	164 70	136 00
	Tara, Village	3	1		4	76 86	42 00	293 73	153 73	98 00
	Eastnor Township	3		1	4	57 65	30 00	115 30	115 30	60 00
		40	6	2	48	813 67	472 00	2,602 28	1,627 28	1,028 00
SOUTH BRUCE.	Kincardine, Town	8	2		10	240 47	168 00	789 95	480 95	432 00
	Carrick	11	1		12	201 55	122 00	493 09	403 09	258 00
	Walkerton	7	2		9	214 06	151 00	778 13	428 13	409 00
	Kinloss	4			4	72 28	40 00	144 57	144 57	80 00
	Greenock	8			8	145 95	80 00	291 90	291 90	160 00
	Culross	2			2	33 36	20 00	66 72	66 72	40 00
	Brant	9			9	153 51	90 00	303 02	303 02	189 00
	Kincardine, Township	2			2	62 55	20 00	125 10	125 10	40 00
	Huron	5	1		6	102 86	62 00	205 72	205 72	138 00
	Lucknow	4	2	1	8	139 00	74 00	278 01	278 01	176 00
	Teeswater	4	1		5	83 40	52 00	166 80	166 80	118 00
		65	9	1	75	1,446 99	879 00	4,014 01	2,894 01	2,051 00

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *exclusive* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Municipality Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.
CARD-WELL.	Alfala	11	1			12	203 89	122 00	467 78	258 00
	Caledon	9	1			10	191 66	102 00	383 32	218 00
	Tecumseth	11	3			14	247 33	146 00	494 78	334 00
	Bolton	3				3	54 36	30 00	198 73	60 00
	Albion	8	1			9	154 96	92 00	309 92	198 00
		42	6			48	852 20	492 00	1,704 53	1,068 00
CARLETON.	Hinchley	2				2	28 34	20 00	56 66	40 00
	North Gower	5				5	70 83	50 00	141 67	100 00
	Marlborough	1				1	14 16	10 00	28 34	20 00
	Goulbourn	2				2	28 33	20 00	56 67	40 00
	Richmond	2	2			4	56 66	40 00	113 33	80 00
	March	1				1	14 16	10 00	28 34	20 00
	Nepean	23	1			24	341 18	242 00	682 35	498 00
		36	3			39	553 66	396 00	1,107 36	834 00
CORN-WALL.	Cornwall, Township	15	2			17	302 66	174 00	605 31	376 00
	Cornwall, Town	9	3			12	277 44	197 00	554 88	533 00
		24	5			29	580 10	371 00	1,160 19	909 00

DUFFERIN.	Orangeville	8	4			12	278 08	192 00	1,156 16	556 16	528 00
	Mulmur	6				6	96 72	60 00	193 44	193 41	120 00
	Mono	4				4	63 14	40 00	126 28	126 28	80 00
	Melancthon	4				4	65 82	40 00	131 66	131 66	80 00
	Garafraxa, East	3				3	51 05	30 00	102 09	102 09	60 00
	Shelburne	3	3			6	119 55	66 00	239 12	239 12	174 00
	Amaranth	5				5	80 60	50 00	161 20	161 20	100 00
		33	7			40	754 96	478 00	2,109 95	1,569 95	1,142 00
DUNDAS.	Iroquois	4	1			5	84 90	52 00	369 81	169 81	118 00
	Matilda	1				1	14 98	10 00	69 97	29 97	20 00
	Morrisburgh	6	3			9	134 84	96 00	779 67	269 67	234 00
	Winchester	6				6	99 88	66 00	439 77	199 77	120 00
	Williamsburgh	5				5	79 91	50 00	234 82	159 82	100 00
	Mountain	5				5	76 17	50 00	152 33	152 33	100 00
		27	4			31	490 68	318 00	2,046 37	981 37	692 00
EAST DURHAM.	Millbrook	5	2			7	122 60	74 00	390 19	245 19	176 00
	Manvers	4				4	48 50	40 00	146 99	96 99	80 00
	Cavan	5				5	80 83	50 00	161 65	161 65	100 00
	Hope	3				3	55 24	30 00	230 47	110 47	60 00
	Port Hope	15	6			21	445 92	325 00	2,291 85	891 85	905 00
		32	8			40	753 09	529 00	3,221 15	1,506 15	1,321 00
WEST DURHAM.	Darlington	3				3	42 49	30 00	144 99	84 99	60 00
	Cartwright	2	1			3	66 60	32 00	133 22	133 22	78 00
	Bowmanville	5	2			7	132 05	117 00	729 12	264 12	323 00
	Newcastle	4	1			5	68 89	52 00	237 80	137 80	118 00
	Clarke	4				4	60 86	40 00	181 73	121 73	80 00
		18	4			22	370 89	271 00	1,426 86	741 86	659 00
ELGIN.	Dunwich	6	1			7	127 30	72 00	344 71	254 71	158 00
	Bayham	8	1			9	164 82	92 00	329 63	329 63	198 00
	Aldborough	7				7	128 85	70 00	292 71	257 71	140 00
	Southwold	7				7	133 34	70 00	266 70	266 70	140 00
	South Dorchester	1				1	17 98	10 00	35 96	35 96	20 00
	Malahide	5				5	92 89	50 00	185 79	185 79	100 00
	Yarmouth	10				10	184 29	100 00	368 59	368 59	200 00
	Vienna	2	1			3	53 94	32 00	107 88	107 88	78 00
	Aylmer	4	1			5	91 40	52 00	302 79	182 79	118 00
	St. Thomas	18	8			26	885 54	476 00	4,396 09	1,771 09	1,524 00
	Port Stanley	3	1		1	5	85 40	42 00	313 32	170 82	98 00
	Springfield	3				3	62 93	30 00	125 86	125 86	60 00
		74	13		1	88	2,028 73	1,096 00	7,070,03	4,057 73	2,834 00

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting ex-penses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to fines or expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
NORTH ESSEX.	West Tilbury	6	.....	.....	.....	6	111 06	60 00	224 14	224 14	60 00	120 00
	Maidstone	2	.....	.....	.....	2	40 92	20 00	81 84	81 84	40 00	40 00
	Windsor	17	10	2	.....	29	735 08	417 00	1,470 15	3,360 15	1,443 00	1,443 00
	Rochester	3	.....	.....	.....	3	58 46	30 00	116 90	116 90	60 00	60 00
	Tilbury	10	1	.....	.....	11	200 22	112 00	400 44	400 44	238 00	238 00
	East Sandwich	4	.....	1	.....	4	70 14	40 00	140 28	140 28	80 00	80 00
	West Sandwich	5	3	.....	.....	9	206 05	129 00	614 61	614 61	361 00	361 00
	Sandwich, Town	3	2	.....	1	5	87 69	54 00	175 36	175 36	136 00	136 00
	Belle River	50	16	2	1	69	1,569 62	882 00	5,113 72	5,021 32	2,178 00	2,178 00
SOUTH ESSEX.	Mersea	2	.....	.....	.....	2	32 66	20 00	85 32	65 32	40 00	40 00
	Leamington	4	.....	.....	.....	5	78 39	52 00	176 76	156 76	118 00	118 00
	Amherstburgh	8	1	.....	.....	12	271 35	192 00	788 70	548 70	528 00	528 00
	Anderdon	2	4	.....	.....	2	31 35	20 00	62 71	62 71	49 00	49 00
	Malden	2	.....	.....	.....	2	31 35	20 00	62 71	62 71	49 00	49 00
	Gosfield	4	.....	.....	.....	4	64 01	40 00	128 02	128 02	80 00	80 00
	Kingsville	2	.....	.....	.....	2	31 35	20 00	162 71	62 71	40 00	40 00
	Colchester, North	.....	.....	.....	.....	.....	16 98	.....	33 97	33 97	.....	.....
	Colchester, South	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		24	5	.....	.....	29	560 44	364 00	1449 99	1120 90	886 00	886 00

FRONTENAC.	Kingston, Township	5	.....	.....	5	52 80	50 00	105 59	105 59	100 00			
	Storrington	2	.....	.....	2	23 75	20 00	45 49	45 49	40 00			
	Pittsburgh	3	.....	.....	3	41 95	30 00	83 88	83 88	60 00			
	Wolfe Island	3	.....	.....	3	29 25	30 00	58 48	58 48	60 00			
	Portsmouth	3	.....	.....	3	29 25	30 00	58 48	58 48	60 00			
	Howe Island	.....	.....	.....	.....	.....	.....	.....	.....	.....			
		16	.....	.....	16	176 00	160 00	351 92	351 92	320 00			
GLENGARRY.	Charlottenburgh	10	1	.....	11	191 14	112 00	382 28	382 28	238 00			
	Lochiel	8	2	.....	10	172 81	104 00	385 62	345 62	236 00			
	Lancaster	8	3	.....	11	183 29	116 00	366 57	366 57	274 00			
	Kenyon	5	1	.....	6	99 49	62 00	199 00	199 00	138 00			
		31	7	.....	38	646 73	394 00	1,333 47	1,293 47	886 00			
EAST GREY.	Artemesia	6	.....	.....	6	93 36	60 00	426 72	189 72	120 00			
	Proton	6	1	.....	7	112 55	72 00	225 08	225 08	158 00			
	Holland	7	1	.....	8	133 26	82 00	266 53	266 53	178 00			
	Collingwood, Township	6	1	.....	7	127 90	72 00	305 79	255 79	158 00			
	Euphrasia	1	.....	.....	1	23 01	10 00	46 05	46 05	20 00			
	Osprey	5	.....	.....	5	85 69	50 00	171 36	171 36	100 00			
		31	3	.....	34	575 77	346 00	1,441 53	1,151 53	734 00			
NORTH GREY.	Owen Sound	10	4	.....	14	277 65	226 00	835 31	555 31	614 00			
	Sullivan	3	1	.....	4	57 37	42 00	114 74	114 74	98 00			
	Meaford	6	2	.....	8	151 46	84 00	562 91	302 91	196 00			
	Derby	4	.....	.....	4	64 25	40 00	128 49	128 49	80 00			
	Keppel	1	.....	.....	1	18 36	10 00	36 72	36 72	20 00			
	Sydenham	3	.....	.....	3	41 31	30 00	82 61	82 61	60 00			
	St. Vincent	1	.....	.....	1	13 77	10 00	27 54	27 54	20 00			
		28	7	.....	35	624 17	442 00	1,788 32	1,248 32	1,088 00			
SOUTH GREY.	Durham	4	1	.....	5	102 28	88 00	354 57	204 57	242 00			
	Bentinck	4	3	.....	7	117 43	76 00	234 86	234 86	194 00			
	Glenelg	4	2	.....	6	92 18	64 00	184 35	184 35	156 00			
	Normanby	10	.....	.....	10	165 42	100 00	330 83	330 83	200 00			
	Egremont	3	.....	.....	3	50 51	30 00	101 02	101 02	60 00			
		25	6	.....	31	527 82	358 00	1,205 63	1,055 63	852 00			

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.
HALDIMAND.	Cayuga, Village	5	1	.....	.....	6	98 30	62 00	196 78	138 00
	Caledonia	4	2	.....	.....	6	122 98	64 00	215 98	156 00
	Oneida	3	.....	.....	.....	3	54 67	30 00	109 32	60 00
	Cayuga, North, Township	4	.....	.....	.....	4	65 59	40 00	131 20	80 00
	Dunn	5	.....	.....	.....	5	82 00	50 00	163 98	100 00
	Rainham	4	.....	.....	.....	4	65 59	40 00	131 20	80 00
	Walpole	12	.....	.....	.....	12	196 78	120 00	393 56	240 00
	Seneca	5	.....	.....	.....	5	82 00	50 00	163 98	100 00
		42	3	.....	.....	45	768 00	456 00	1,536 00	954 00
HALTON.	Nelson	4	.....	.....	1	5	70 25	40 00	140 48	80 00
	Nassagaweya	3	.....	.....	.....	3	46 82	30 00	93 63	60 00
	Esquesing	7	.....	.....	.....	7	109 23	70 00	218 47	140 00
	Burlington	4	.....	.....	.....	4	62 43	40 00	124 84	80 00
	Georgetown	5	.....	.....	.....	5	79 33	50 00	158 66	100 00
	Oakville	5	1	.....	.....	6	130 05	97 00	260 10	253 00
	Milton	4	.....	.....	.....	4	89 75	76 00	179 49	204 00
	Acton	3	.....	.....	.....	3	46 82	30 00	93 63	60 00
	Trafalgar	6	.....	.....	.....	6	93 64	60 00	187 27	120 00
		41	1	.....	1	43	728 32	493 00	2,091 57	1,456 57	1,087 00
HAMILTON.	Hamilton, City	89	55	7	2	153	4,994 37	2,490 00	17,288 74	9,988 74	7,780 00

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SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
WEST HURON.	Goderich, Town	10	3	..	.....	13	300 09	214 00	1,185 18	600 18	576 00
	Wawanosh, East	2	...	.....	.....	2	33 66	20 00	67 31	67 31	40 00
	Hullett, West part	1	...	.....	.....	1	16 82	10 00	33 66	33 66	20 00
	Wawanosh, West	3	...	.....	.....	3	56 10	30 00	112 19	112 19	60 00
	Turnberry, West part	1	...	.....	.....	1	21 03	10 00	42 08	42 08	20 00
	Wingham	7	2	..	.....	9	227 17	143 00	634 35	454 35	277 00
	Clinton	7	1	.....	.....	8	179 50	131 00	568 98	358 98	339 00
	Ashfield	4	....	.....	.....	4	67 31	40 00	134 62	134 62	80 00
	Colborne	4	...	.....	.....	7	123 41	70 00	246 81	246 81	140 00
	Blythe	4	1	.....	.....	5	96 76	52 00	268 52	193 52	118 00
		46	7	.....	.....	53	1121 85	720 00	3,243 70	2,243 70	1,770 00
EAST KENT.	Howard	4	1	.....	.....	5	84 00	52 00	168 02	168 02	118 00
	Blenheim	4	...	.....	.....	4	68 61	40 00	237 22	137 22	80 00
	Dresden	5	...	.....	.....	5	95 20	50 00	390 42	190 42	100 00
	Camden	3	1	.....	.....	4	78 40	42 00	371 82	156 82	98 00
	Bothwell	2	...	.....	.....	2	35 00	20 00	70 01	70 01	40 00
	Harwich	4	1	.....	.....	5	112 01	88 00	434 01	274 01	242 00
	Orford	10	1	.....	.....	11	194 62	112 00	389 23	389 23	238 00
	Ridgetown	7	...	.....	.....	7	128 81	70 00	257 61	257 61	156 00
		4	2	.....	.....	6	103 61	64 00	497 23	207 23	156 00
		43	6	.....	.....	49	900 26	538 00	2,815 57	1857 00	1212 00

WEST KENT.	Chatham, Town	13	6	.....	19	355 65	301 00	5761 31	711 31	819 00
	Chatham, Township	5	.....	.....	5	74 13	50 00	142 26	142 26	100 00
	Dover	4	.....	.....	4	54 29	40 00	108 39	108 39	80 00
	Wallaceburg	4	1	.....	5	77 90	52 00	485 81	155 81	118 00
	Tilbury, East	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Raleigh	.....	.....	.....	.....	.....	.....	.....	.....	.....
		26	7	.....	33	558 88	443 00	6,557 77	1,117 77	1,117 00
KINGSTON.	Kingston, City	64	20	2	86	2,724 21	1,570 00	9,148 41	5,448 41	4,950 00
EAST LAMBTON.	Forest	5	2	.....	7	90 31	74 00	540 63	180 63	176 00
	Bosanquet	...	.....	1	1	6 19	.....	32 37	12 37	.....
	Warwick	2	.....	.....	2	24 74	20 00	49 49	49 49	40 00
	Brooke	1	.....	.....	1	13 61	10 00	27 21	27 21	20 00
	Wyoming	3	1	.....	4	49 49	42 00	178 97	98 97	98 00
	Watford	4	2	.....	6	74 29	64 00	488 45	148 45	156 00
	Euphemia	3	.....	.....	3	37 11	30 00	119 23	74 23	60 00
	Plympton	3	.....	.....	3	53 19	30 00	166 39	106 39	60 00
	Arkona	2	.....	.....	2	25 98	20 00	151 96	51 96	40 00
	Thedford	3	2	.....	5	61 86	54 00	383 70	123 70	136 00
	Alvinston, Village	3	.....	.....	3	42 07	30 00	114 13	84 13	60 00
		29	7	1	37	478 77	374 00	2,252 53	956 53	846 00
WEST LAMBTON.	Petrolia	8	3	.....	11	213 98	180 00	527 95	437 95	490 00
	Moore	9	2	.....	11	167 25	114 00	334 51	334 51	256 00
	Sarnia, Township	1	...	.....	1	14 30	10 00	38 58	38 58	20 00
	Sombra	6	3	.....	9	142 95	96 00	285 90	285 90	234 00
	Oil Springs	2	...	.....	2	28 59	20 00	57 19	57 19	40 00
	Enniskillen	2	1	.....	3	42 88	32 00	85 77	85 77	78 00
	Dawn	1	.....	.....	1	14 29	10 00	28 59	28 59	20 00
	Sarnia, Town	9	6	.....	15	299 74	233 00	1,199 48	599 48	647 00
	Point Edward	5	.....	.....	5	70 05	50 00	340 09	140 09	100 00
		43	15	.....	58	994 03	745 00	2,898 06	1,998 06	1,885 00
NORTH LANARK.	Lanark, Village	2	.....	.....	2	24 08	20 00	148 17	48 17	40 00
	Pakenham	3	1	.....	4	56 21	42 00	112 42	112 42	98 00
	Dalhousie	2	.....	.....	2	24 08	20 00	48 17	48 17	40 00
	Almonte	4	...	.....	4	73 26	68 00	306 53	146 53	172 00
	Carleton Place	4	1	.....	5	85 31	52 00	390 62	170 62	118 00
	Ramsay	3	.....	.....	3	37 05	30 00	104 09	74 09	60 00
	Lanark, Township	.....	.....	.....	.....	.....	.....	.....	.....	.....
		18	2	.....	20	299 99	232 00	1,110 00	600 00	528 00

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the (Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
SOUTH LANARK.	Perth	7	3	.....	.....	10	185 23	163 00	1,070 47	370 47	447 00
	Smith's Falls	5	1	.....	.....	6	84 51	62 00	734 01	169 01	138 00
	Beckwith	2	.....	.....	.....	2	27 78	20 00	55 57	55 57	40 00
	Bathurst	1	.....	.....	.....	1	13 89	10 00	27 78	27 78	20 00
	Drummond	2	.....	.....	.....	2	28 94	20 00	57 88	57 88	40 00
	South Sherbrooke	2	.....	.....	.....	2	13 89	10 00	27 78	27 78	20 00
	North Elmsley	1	.....	.....	.....	1	9 26	.....	18 52	18 52	.....
		18	4	.....	.....	22	363 50	285 00	2,002 01	727 01	705 00
NORTH LEEDS AND GRENVILLE AND SOUTH GRENVILLE.	Prescott	9	3	.....	.....	12	275 18	197 00	1,405 34	550 34	533 00
	Edwardsburgh	2	.....	.....	.....	2	41 74	20 00	83 47	83 47	40 00
	South Elmsley	2	.....	.....	.....	2	31 30	20 00	62 60	62 60	40 00
	Kemptville	4	2	.....	.....	6	112 16	64 00	764 32	224 32	156 00
	Kitley	5	.....	.....	.....	5	80 86	56 00	161 72	161 72	100 00
	Oxford	3	.....	.....	.....	3	46 95	30 00	93 90	93 90	60 00
	Augusta	4	.....	.....	.....	4	73 04	40 00	146 07	146 07	80 00
	Merrickville	3	1	.....	.....	4	65 96	42 00	287 81	127 81	98 00
	Wolford	2	.....	.....	.....	2	31 30	20 00	62 60	62 60	40 00
	Cardinal, Village	2	.....	.....	.....	2	31 30	20 00	92 60	62 60	40 00
		36	6	.....	.....	42	787 73	503 00	3,160 43	1,575 43	1,187 00

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SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1883-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1883-9, without regard to any excess over the statutory duties or to fines or expenses.
NORTH MIDDLESEX.							$ c.	$ c.	$ c.	$ c.	$ c.
	East Williams	3	.....	.....	.....	3	46 47	30 00	92 95	92 95	60 00
	McGillivray	3	.....	.....	.....	3	51 50	30 00	102 99	102 99	60 00
	Adelaide	3	.....	.....	.....	3	45 21	30 00	90 43	90 43	60 00
	Biddulph	5	.....	.....	.....	5	76 61	50 00	153 23	153 23	100 00
	Ailsa Craig	3	2	.....	.....	5	79 12	54 00	267 00	158 25	136 00
	Lobo	4	.....	.....	.....	4	61 54	40 00	123 09	123 09	80 00
	Parkhill	5	2	.....	.....	7	126 86	74 00	608 71	253 71	176 00
	Lucan	4	2	.....	.....	6	96 71	64 00	313 42	193 42	156 00
	West Williams	2	.....	.....	.....	2	35 17	20 00	70 33	70 33	40 00
		32	6	.....	.....	38	619 19	392 00	1,822 15	1,238 40	868 00
WEST MIDDLESEX.											
	Ekfrid	4	.....	.....	.....	4	63 39	40 00	126 78	126 78	80 00
	Strathroy	8	3	.....	.....	11	235 45	172 00	990 89	470 89	458 00
	Wardsville	3	.....	.....	.....	3	58 21	30 00	161 43	116 43	60 00
	Metcalfe	4	.....	.....	.....	4	62 10	40 00	124 19	124 19	80 00
	Delaware	2	1	.....	.....	3	46 57	32 00	93 15	93 15	78 00
	Caradoc	6	.....	.....	.....	6	93 14	60 00	186 29	186 29	120 00
	Glencoe	4	.....	.....	.....	4	62 10	40 00	244 19	124 19	80 00
	Mosa	1	.....	.....	.....	1	16 82	10 00	33 63	33 63	20 00
	Newbury	3	.....	.....	.....	3	47 87	30 00	170 73	95 73	60 00
		35	4	.....	.....	39	685 65	454 00	2,133 28	1,371 28	1,036 00

MONCK.	Wainfleet	3	.....	.....	3	39 84	30 00	79 70	79 70	60 00	60 00	
	Canborough	2	.....	.....	2	17 93	20 00	35 86	35 86	40 00	40 00	
	Caistor	2	.....	.....	2	23 91	29 00	47 82	47 82	40 00	40 00	
	Sherbrooke	1	.....	.....	1	11 96	10 00	23 91	23 91	20 00	20 00	
	Dunnville	6	2	.....	8	105 69	84 00	731 19	211 19	196 00	196 00	
	Gainsborough	4	.....	.....	4	48 81	40 00	97 63	97 63	80 00	80 00	
	Pelham	.....	.....	.....	.....	9 96	.....	19 93	19 93	.....	.....	
		18	2	.....	20	258 01	204 00	1,036 04	516 04	436 00	436 00	
MUSKOKA & PARRY SOUND.	Morrison	1	.....	.....	1	16 62	10 00	33 25	33 25	20 00	20 00	
	Bracebridge	4	2	.....	6	112 21	64 00	314 42	224 42	156 00	156 00	
	McKellar	1	.....	.....	1	16 62	10 00	33 25	33 25	20 00	20 00	
	Foley	2	.....	.....	2	45 68	20 00	91 36	91 36	40 00	40 00	
	Stephenson	2	.....	.....	2	33 25	20 00	66 49	66 49	40 00	40 00	
	Wood and Medora	1	.....	.....	1	18 01	10 00	36 02	36 02	20 00	20 00	
	Macaulay	3	.....	.....	3	49 87	30 00	99 74	99 74	60 00	60 00	
	Draper and Oakley	2	.....	.....	2	33 25	20 00	66 49	66 49	40 00	40 00	
	Humphrey	3	.....	1	4	58 18	39 00	116 37	116 37	60 00	60 00	
	Gravenhurst	5	2	.....	7	130 22	74 00	260 43	260 43	176 00	176 00	
	Stisted	1	.....	.....	1	16 62	10 00	33 25	33 25	20 00	.....	
	McDougall	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
	McLean and Ridout	1	.....	.....	1	16 62	10 00	43 25	33 25	20 00	.....	
	Unorganized Territory, including the Townships of Chaffey, Spence, Chapman and Perry	17	.....	.....	17	901 80	510 00	.....	.....	.....	.....	
	Armour	2	.....	.....	2	33 25	20 00	66 49	66 49	40 00	.....	
	Ryde	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		45	4	.....	1	50	1,482 20	838 00	1,260 81	1,160 81	712 00	
NIPIS-SING.	Nipissing District — Unorganized Territory	11	8	.....	19	1,439 75	730 00	.....	.....	.....	.....	
NORFOLK.	Middleton	9	1	.....	10	165 78	102 00	331 54	331 54	218 00	218 00	
	Townsend	.....	.....	.....	.....	5 44	.....	10 87	10 87	.....	.....	
	Walsingham	7	.....	.....	7	127 73	70 00	255 45	255 45	140 00	140 00	
	Simcoe	8	3	.....	11	259 53	180 00	739 08	519 08	490 00	490 00	
	Windham	11	.....	.....	11	188 88	110 00	377 75	377 75	220 00	220 00	
	Woodhouse	2	.....	.....	2	32 61	20 00	65 22	65 22	40 00	40 00	
	Charlotteville	8	.....	.....	8	145 40	80 00	290 79	290 79	160 00	160 00	
	Houghton	4	.....	.....	4	65 23	40 00	130 44	130 44	80 00	80 00	
	Waterford	2	1	.....	3	48 91	32 00	112 85	97 85	78 00	78 00	
	Port Dover	4	1	.....	5	84 24	52 00	293 49	168 49	118 00	118 00	
		55	6	.....	61	1,123 75	686 00	2,607 48	2,247 48	1,544 00		

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
EAST NORTHUMBERLAND.	Seymour	1				1	14 99	10 00	29 98	29 98	20 00
	Murray	2				2	28 84	20 00	57 66	57 66	40 00
	Cramahe	2				2	27 68	20 00	85 35	85 35	40 00
	Percy	3	1			4	56 51	42 00	163 02	133 02	98 00
	Colborne	4	1		1	6	70 35	52 00	140 71	110 71	116 00
	Campbellford	5	2			8	104 94	74 00	322 39	246 39	176 00
	Hastings	3	2			5	69 20	54 00	338 40	158 40	136 00
	Brighton, Village	4				4	54 20	40 00	168 42	108 42	80 00
	Brighton, Township										
		24	6		1	31	426 71	312 00	1,335 93	853 43	708 00
WEST NORTHUMBERLAND.	Alnwick	1			1	2	32 13	10 00	64 98	64 98	20 00
	South Monaghan	2				2	32 14	20 00	64 26	64 26	40 00
	Haldimand	4				4	64 27	40 00	128 54	128 54	80 00
	Hamilton	7				7	121 84	70 00	243 68	243 68	140 00
	Cobourg, Town	12	5			17	440 56	272 00	2,193 62	881 12	738 00
		26	5		1	32	690 94	412 00	2,694 38	1,381 88	1,018 00

NORTH ONTARIO.	Reach	6	1	.....	.....	7	112 94	72 00	224 09	224 09	158 00		
	Uxbridge, Village	4	1	.....	.....	5	95 86	52 00	401 72	191 72	118 00		
	Brock	5	.....	.....	.....	5	75 94	50 00	151 87	151 87	100 00		
	Mara	4	1	.....	.....	5	80 93	52 00	161 84	161 84	118 00		
	Thorah	3	1	.....	.....	4	61 01	42 00	182 01	122 01	98 00		
	Port Perry	4	2	.....	.....	6	95 86	64 00	731 71	191 71	156 00		
	Uxbridge, Township	5	.....	.....	.....	5	74 69	50 00	149 38	149 38	100 00		
	Scott	3	.....	.....	.....	3	49 80	30 00	99 60	99 60	60 00		
	Raana	2	1	.....	.....	3	59 76	32 00	119 52	119 52	78 00		
	Cannington, Village	2	2	.....	.....	4	84 66	44 00	279 31	169 31	116 00		
		38	9	.....	.....	47	790 55	488 00	2,501 05	1,581 05	1,102 00		
SOUTH ONTARIO.	Oshawa	6	1	.....	.....	7	151 47	122 00	842 95	302 95	328 00		
	Whitby, Town	8	2	.....	.....	10	211 01	168 00	802 03	422 03	452 00		
	Whitby, Township	2	.....	.....	.....	2	36 25	20 00	122 50	72 50	40 00		
	Whitby, East, Township	3	.....	.....	.....	3	53 68	30 00	116 17	106 17	60 00		
	Pickering	9	.....	.....	.....	9	154 06	90 00	488 13	308 13	180 00		
		28	3	.....	.....	31	605 87	430 00	2,371 78	1,211 78	1,060 00		
OTTA. WA.	Ottawa, City	75	77	.....	1	153	4,777 90	2,474 00	13,330 80	9,555 80	7,776 00		
NORTH OXFORD.	East Nissouri	2	.....	.....	.....	2	44 43	20 00	88 85	88 85	40 00		
	Blandford	2	.....	.....	.....	2	33 32	20 00	66 64	66 64	40 00		
	East Zorra	4	2	.....	.....	6	101 35	64 00	202 71	202 71	156 00		
	Embro	2	.....	.....	.....	2	56 93	20 00	193 85	113 85	40 00		
	West Zorra	3	.....	.....	.....	3	52 76	30 00	105 52	105 52	60 00		
	Woodstock	13	5	.....	.....	18	413 73	289 00	1,437 46	827 46	781 00		
	Blenheim	12	.....	.....	.....	12	204 09	120 00	408 19	408 19	240 00		
		38	7	.....	.....	45	906 61	563 00	2,503 22	1,813 22	1,357 00		
SOUTH OXFORD.	Ingersoll	12	4	.....	.....	16	358 95	260 00	2,037 92	717 92	700 00		
	Tilsonburg	5	2	.....	.....	7	159 39	117 00	583 79	318 79	323 00		
	Norwich, Village	3	.....	.....	.....	3	64 29	30 00	128 58	128 58	60 00		
	North Oxford	3	.....	.....	.....	3	50 80	30 00	101 80	101 80	60 00		
	North Norwich	2	.....	.....	.....	2	33 49	20 00	66 96	66 96	40 00		
	South Norwich	4	.....	.....	.....	4	65 63	40 00	131 26	131 26	80 00		
	Dereham	4	.....	.....	.....	4	64 29	40 00	128 58	128 58	80 00		
	West Oxford	1	.....	.....	.....	1	32 15	10 00	64 30	64 30	20 00		
	East Oxford	1	.....	.....	.....	1	16 07	10 00	32 15	32 15	20 00		
		35	6	.....	.....	41	845 15	557 00	3,275 34	1,690 34	1,383 00		

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid by the Government under the Act of 1878-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1878-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
PEEL.	Brampton	6	2	.....	.....	8	169 27	134 00	698 55	338 55	366 00
	Chinguacousy	11	.....	.....	.....	11	173 18	110 00	456 35	346 35	220 00
	Toronto	13	.....	.....	1	15	243 59	142 00	580 75	487 00	298 00
	Toronto Gore	4	1	.....	.....	5	79 43	52 00	158 85	158 85	118 00
	Streetsville	2	1	.....	.....	3	49 48	32 00	158 97	98 97	78 00
		36	5	.....	1	42	714 86	470 00	2,053 47	1,429 72	1,080 00
NORTH PERTH.	Mornington	13	1	.....	.....	14	239 00	142 00	478 00	478 00	298 00
	Ellice	6	.....	.....	.....	6	113 75	60 00	227 49	227 49	120 00
	Wallace	3	.....	.....	.....	3	51 21	30 00	102 43	102 43	60 00
	Elma	6	.....	.....	.....	6	100 45	60 00	200 90	200 90	120 00
	Logan	2	.....	.....	.....	2	39 83	20 00	79 67	79 67	40 00
	Listowel	7	4	.....	.....	11	264 99	175 00	1,019 82	529 82	485 00
	Stratford	20	8	.....	.....	28	655 81	444 00	3,271 62	1,331 61	1,196 00
	North Easthope	4	.....	.....	.....	4	59 75	40 00	119 50	119 50	80 00
	Milverton, Village	3	.....	.....	.....	3	51 21	30 00	102 43	102 43	60 00
		64	13	.....	.....	77	1,575 91	1,601 00	5,601 86	3,151 85	2,459 00

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SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, after deducting its proportion of fines, and its proportion of expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
NORTH RENFREW.	Bromley	2	2	.....	.....	4	68 40	44 00	136 79	136 79	116 00
	Pembroke	9	5	.....	.....	14	365 61	221 00	1,151 21	731 21	609 00
	Ross	1	1	.....	.....	2	31 57	22 00	63 14	63 14	58 00
	Westmeath	5	.....	.....	.....	5	85 56	50 00	171 01	171 01	100 00
	Wilberforce	3	.....	.....	.....	3	47 35	30 00	94 71	94 71	60 00
	Head, Maria and Clara	1	.....	.....	.....	1	36 83	10 00	73 66	73 66	20 00
	Pelawawa	.....	.....	.....	.....	.....	18 41	.....	36 83	36 83	.....
		21	8	.....	.....	29	653 67	377 00	1,727 35	1,307 35	963 00
SOUTH RENFREW.	McNab	5	.....	.....	.....	5	68 99	50 00	137 99	137 99	100 00
	Renfrew	5	4	.....	.....	9	143 30	98 00	421 60	286 60	272 00
	Grattan	3	2	.....	.....	5	79 61	54 00	159 22	159 22	156 00
	Brougham	3	1	.....	.....	4	47 77	32 00	95 54	95 54	78 00
	Bromenell	3	.....	.....	.....	3	47 77	32 00	95 54	95 54	60 00
	Arnprior	6	2	.....	.....	8	128 70	84 00	257 41	257 41	196 00
	Radcliffe and Raglan	2	.....	.....	.....	2	31 85	20 00	63 69	63 69	40 00
	Hagarty, Sherwood and Jones	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Griffith and Matawatchan	.....	.....	.....	.....	.....	5 31	.....	10 61	10 61	.....
		26	9	.....	.....	35	553 30	368 00	1,241 60	1,106 60	882 00

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SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9 without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
THUNDER BAY.	Shuniah	9	1	1	.....	11	201 46	102 00	852 94	402 94	218 00
	Neebing	3	2	.....	.....	5	83 83	54 00	467 67	167 67	136 00
	Unorganized Territory	.....	1	.....	.....	1	48 67	50 00	.....	.....	.....
		12	4	1	.....	17	333 96	206 00	1,320 61	570 61	354 00
TORONTO.	Toronto, City	210	95	15	1	321	10,053 73	5,390 00	35,407 45	20,107 45	16,560 00
NORTH VICTORIA AND HALIBURTON.	Eldon	11	.....	.....	.....	11	156 56	110 00	313 11	313 11	220 00
	Fenelon	6	.....	.....	1	7	87 33	60 00	174 66	174 66	120 00
	Fenelon Falls	2	.....	.....	.....	2	29 10	20 00	138 22	58 22	40 00
	Bexley	2	.....	.....	.....	2	28 46	20 00	56 94	56 94	40 00
	Laxton and Digby	1	.....	.....	.....	1	14 24	10 00	28 46	28 46	20 00
	Somerville	3	.....	.....	.....	3	42 69	30 00	85 40	85 40	60 00
	Anson	1	.....	.....	.....	1	14 24	10 00	28 46	28 46	20 00
	Minden	2	.....	.....	.....	2	28 46	20 00	56 94	56 94	40 00
	Snowdon	1	.....	.....	.....	1	14 23	10 00	28 47	28 47	20 00
	Dysart	2	1	.....	.....	3	42 69	32 00	85 40	85 40	78 00
	Glamorgan	1	.....	.....	.....	1	14 24	10 00	28 46	28 46	20 00
	Sherborne	1	.....	.....	.....	1	14 24	10 00	28 46	28 46	20 00
	Dalton	1	.....	.....	.....	1	14 24	10 00	28 46	28 46	20 00
		34	1	.....	1	36	500 72	352 00	1,081 44	1,001 44	718 00

SOUTH VICTORIA.	Lindsay, Town	14	2			16	325 31	270 00	1,930 60	650 60	710 00
	Mariposa	6				6	97 04	60 00	194 06	194 06	120 00
	Emily										
	Verulam	1				1	14 56	10 00	29 11	29 11	20 00
	Bobcaygeon	3				3	43 66	30 00	207 32	87 32	60 00
	Omemee	4	1			5	73 99	52 00	507 98	147 98	118 00
		28	3			31	554 56	422 00	2,869 07	1,109 07	1,028 00
NORTH WATERLOO.	Waterloo, T'nship, N. part	7				7	131 20	70 00	262 41	262 41	140 00
	Woolwich	11	1			12	241 02	122 00	482 05	482 05	258 00
	Wellesley	14	1			15	278 09	152 00	556 20	556 20	318 00
	Berlin	8	6			14	339 42	216 00	838 83	678 83	604 00
	Waterloo, Town	6	1			7	171 14	122 00	462 27	342 27	328 00
		46	9			55	1,160 87	682 00	2,601 76	2,321 76	1,648 00
SOUTH WATERLOO.	Galt	8	4			12	298 43	192 00	1,116 84	596 84	528 00
	Preston	5				5	82 89	50 00	265 78	165 78	100 00
	Wilmot	13	1			14	232 09	142 00	464 20	464 20	298 00
	Waterloo, T'nship, S. part	5				5	82 89	50 00	165 78	165 78	100 00
	Hespeler	3				3	49 73	30 00	99 48	99 48	60 00
	North Dumfries	4				4	71 84	40 00	223 67	143 67	80 00
	New Hamburgh	4	2			6	99 47	64 00	278 94	198 94	156 00
		42	7			49	917 34	568 00	2,614 69	1,834 69	1,322 00
WELLAND.	Niagara Falls (f'mly Clifton)	10	6		1	17	390 73	250 00	781 48	781 48	690 00
	Crowland	3				3	55 43	30 00	110 84	110 84	60 00
	Chippewa	4	1			5	84 78	52 00	169 56	169 56	118 00
	Fort Erie	3				3	56 81	30 00	128 62	113 62	60 00
	Port Colborne	7	3		1	11	204 80	106 00	679 61	409 61	254 00
	Humberstone	10	1			11	206 45	112 00	412 90	412 90	238 00
	Stamford	7	1			8	149 65	82 00	299 28	299 28	178 00
	Thorold, Township	7	1			8	135 79	82 00	271 57	271 57	178 00
	Thorold, Town	6	2		1	9	195 37	134 00	640 73	390 73	366 00
	Welland	8	2		1	11	260 47	168 00	653 45	520 95	452 00
	Willoughby	1				1	20 79	10 00	41 56	41 56	20 00
	Bertie	12	2			14	277 10	144 00	834 21	554 21	316 00
		78	19		4	101	2,038 17	1,200 00	5,023 81	4,076 31	2,930 00

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
CENTRE WELLINGTON.	Pilkington	2	.....	.....	.....	2	33 88	20 00	67 76	67 76	40 00
	Elora	2	3	.....	.....	5	138 24	86 00	439 48	276 48	214 00
	Nichol	5	.....	.....	.....	5	113 84	70 00	227 68	227 68	140 00
	Fergus	6	3	.....	.....	9	146 40	96 00	412 81	292 81	234 00
	West Garafraxa	4	.....	.....	.....	4	67 76	40 00	135 53	135 53	80 00
	Erin, Township	7	.....	.....	.....	7	123 32	70 00	246 64	246 64	140 00
	East Luther	2	.....	.....	.....	2	33 88	20 00	67 76	67 76	40 00
	West Luther	1	.....	.....	.....	1	17 02	10 00	35 23	35 23	20 00
	Erin, Village	3	.....	.....	.....	3	55 57	30 00	111 14	111 14	60 00
		37	6	.....	.....	43	730 52	442 00	1,741 03	1,461 03	968 00
SOUTH WELLINGTON.	Eramosa	10	.....	.....	.....	10	181 99	100 00	363 96	363 96	200 00
	Guelph, Township	4	.....	.....	.....	4	71 92	40 00	143 82	143 82	80 00
	Puslinch	7	.....	.....	.....	7	124 75	70 00	249 48	249 48	140 00
	Guelph, City	18	8	.....	.....	26	774 85	476 00	3,499 68	1,549 68	1,524 00
		39	8	.....	.....	47	1,153 51	686 00	4,256 94	2,306 94	1,944 00

WEST WELLINGTON.	Mount Forest	8	4	.....	12	286 39	192 00	1,112 78	572 78	598 00			
	Clifford	4	1	.....	5	90 41	52 00	210 82	180 82	118 00			
	Arthur, Village	6	2	.....	8	169 16	84 00	758 32	338 32	196 00			
	Harriston	5	1	.....	6	142 91	105 00	405 81	285 81	285 00			
	Drayton	5	1	.....	6	106 45	62 00	292 90	212 90	138 00			
	Palmerston	8	1	.....	9	211 45	156 00	652 89	422 89	414 00			
	Arthur, Township	3	.....	.....	3	36 46	30 00	107 91	107 91	60 00			
	Maryborough	8	.....	.....	8	141 45	80 00	282 90	282 90	160 00			
	Minto	2	.....	.....	2	35 00	20 00	70 00	70 00	40 00			
	Peel	9	.....	.....	9	182 28	99 00	329 57	329 57	180 00			
		58	10	.....	68	1,401 95	871 00	4,223 90	2,803 99	2,119 00			
NORTH WENT-WORTH.	Dundas	9	4	.....	13	274 90	200 00	1,069 81	549 81	571 00			
	Beverley	7	.....	.....	7	117 50	70 00	235 01	235 01	140 00			
	West Flamborough	9	.....	.....	9	150 00	99 00	300 02	300 02	180 00			
	East Flamborough	5	.....	.....	5	66 14	50 00	132 28	132 28	100 00			
	Waterdown	3	.....	.....	3	46 57	30 00	213 13	93 13	60 00			
	East or West Flamborough	1	.....	.....	1	15 52	10 00	31 05	31 05	20 00			
		34	4	.....	38	670 63	459 00	1,981 30	1,341 30	1,071 00			
SOUTH WENT-WORTH.	Binbrook	3	.....	.....	3	43 14	30 00	86 29	86 29	60 00			
	Ancaster	6	2	.....	7	94 71	74 00	200 44	189 44	176 00			
	Saltfleet	6	.....	.....	6	85 23	60 00	170 46	170 46	120 00			
	Barton	4	.....	.....	4	55 77	40 00	111 54	111 54	80 00			
	Glanford	3	.....	.....	3	48 40	30 00	96 81	96 81	60 00			
		21	2	.....	23	327 25	234 00	674 54	654 54	496 00			
EAST YORK.	Scarborough	6	.....	.....	6	104 04	60 00	568 08	208 08	120 00			
	Markham, Township	11	.....	.....	11	176 87	110 00	793 75	353 75	240 00			
	York, East of Yonge street	17	4	.....	21	355 04	218 00	1,139 07	710 07	492 00			
	Markham, Village	3	.....	.....	3	45 81	30 00	213 64	93 64	60 00			
	Yorkville	7	2	.....	9	141 36	94 00	1,028 72	288 72	216 00			
		44	6	.....	50	827 12	512 00	3,734 26	1,654 26	1,108 00			

SCHEDULE F.—Statement of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

License District.	MUNICIPALITY.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or to expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to fines or to expenses.
							$ c.	$ c.	$ c.	$ c.	$ c.
NORTH YORK.	Aurora	3	2	.....	.....	5	83 88	54 00	292 76	167 76	136 00
	Holland Landing	2	1	.....	.....	3	49 50	32 00	99 00	99 00	78 00
	North Gwillimbury	3	.....	.....	.....	3	59 88	30 00	101 75	101 75	60 00
	King	12	.....	.....	.....	12	213 13	120 00	906 26	426 26	246 00
	East Gwillimbury	5	.....	.....	.....	5	82 50	50 00	165 00	165 00	100 00
	Whitchurch	3	.....	.....	.....	3	56 38	30 00	112 75	112 75	60 00
	Newmarket	6	4	.....	.....	10	246 13	158 00	683 52	492 27	442 00
	Georgina	4	1	.....	.....	5	87 25	52 00	170 51	170 51	118 00
	Stouffville	3	.....	.....	.....	3	49 50	30 00	159 00	99 00	60 00
		41	8	.....	.....	49	917 75	556 00	2,690 55	1,834 30	1,294 00
WEST YORK.	York, west of Yonge Street	16	1	.....	.....	17	285 06	172 00	910 13	570 13	358 00
	Vaughan	14	2	.....	.....	16	279 48	164 00	1,198 95	558 95	356 00
	Etobicoke	5	1	.....	.....	6	100 61	62 00	201 23	201 23	138 00
	Richmond Hill	3	.....	.....	.....	3	62 88	30 00	395 78	125 78	60 00
	Parkdale	3	1	.....	.....	3	51 71	32 00	373 41	103 41	78 00
	Brockton	2	2	.....	.....	5	83 85	54 00	267 69	167 69	136 00
		43	7	.....	.....	50	863 59	514 00	3,347 19	1,727 19	1,126 00
	Totals	3,311	764	34	30	4,139	89,758 75	53,730 00	276,983 79	173,702 62	133,704 00

[*For* RECAPITULATION, *see next page.*]

SCHEDULE F.—*Continued.*

RECAPITULATION of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each License District in the Province during the License Year 1881-2, and shewing:

1. The amount actually paid in each case to the Government.
2. The amount that would have been paid to the Government under the Act of 1868-9, assuming the same number of Licenses to have issued under that Act as were issued in 1881-2.
3. The amount actually paid to the Municipalities, *including* any excesses over the Statutory Duties, imposed by Municipal By-laws.
4. The amount actually paid to the Municipalities, *excluding* any excesses over the Statutory Duties, imposed by Municipal By-laws.
5. The amount that would have been paid to the Municipalities under the Act of 1868-9, not including any excesses over the Statutory Duties, imposed by Municipal By-laws under that Act.

LICENSE DISTRICTS.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
						$ c.	$ c.	$ c.	$ c.	$ c.
Addington	40	2	.....	.....	42	703 42	424 00	1,446 85	1,406 85	876 00
Algoma	17	5	.....	.....	22	708 64	512 00	625 60	430 60	278 00
Brant, North	19	2	.....	.....	21	376 30	271 00	992 59	752 59	649 00
Brant, South	36	12	1	.....	49	1,233 17	734 00	2,918 86	2,466 36	2,156 00
Brockville and South Leeds	53	12	.....	.....	65	1,361 03	787 00	5,073 30	2,722 05	1,893 00
Bruce, North	40	6	.....	2	48	813 67	472 00	2,602 28	1,627 28	1,028 00
Bruce, South	65	9	.....	1	75	1,446 99	879 00	4,014 01	2,894 01	2,051 00
Cardwell	42	6	.....	.....	48	852 26	492 00	1,794 53	1,704 53	1,068 00
Carleton	36	3	.....	.....	39	553 66	396 00	1,107 36	1,107 36	834 00
Cornwall	24	5	.....	.....	29	580 10	371 00	2,755 19	1,160 19	909 00
Dufferin	33	7	.....	.....	40	754 96	478 00	2,109 95	1,500 95	1,142 00
Dundas	27	4	.....	.....	31	490 68	318 00	2,046 37	981 37	692 00
Durham, East	32	8	.....	.....	40	753 09	529 00	3,221 15	1,506 15	1,321 00
Durham, West	18	4	.....	.....	22	370 89	271 00	1,426 86	741 86	659 00
Elgin	74	13	.....	1	88	2,028 73	1,096 00	7,070 03	4,057 53	2,834 00
Essex, North	50	16	2	1	69	1,509 62	862 00	5,113 72	3,021 22	2,178 00

SCHEDULE F.—Recapitulation of the number of Tavern, Shop, Wholesale, and Six Months' Licenses issued in each Municipality, etc.—*Continued.*

LICENSE DISTRICT.	Tavern.	Shop.	Wholesale.	Six Months.	Total.	Amount paid to the Government, including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Government under the Act of 1868-9, without regard to fines or expenses.	Amount paid to the Municipality, *including* any excess over the statutory duties, and its proportion of fines, after deducting expenses.	Amount paid to the Municipality, *excluding* any excess over the statutory duties, but including its proportion of fines, after deducting expenses.	Amount that would have been paid to the Municipality under the Act of 1868-9, without regard to any excess over the statutory duties or to fines or expenses.
						$ c.	$ c.	$ c.	$ c.	$ c.
Essex, South	24	5	.....	.....	29	560 44	364 00	1,440 90	1,120 90	886 00
Frontenac	16	.....	.....	.....	16	176 00	160 00	351 92	351 92	320 00
Glengarry	31	7	.....	.....	38	646 73	394 00	1,333 47	1,293 47	836 00
Grey, East	31	3	.....	.....	34	575 77	346 00	1,441 53	1,151 53	734 00
Grey, North	28	7	.....	.....	35	624 17	442 00	1,788 32	1,248 32	1,088 00
Grey, South	25	6	.....	.....	31	527 82	358 00	1,205 63	1,055 63	852 00
Haldimand	42	3	.....	.....	45	768 00	456 00	2,116 00	1,536 00	954 00
Halton	41	1	.....	1	43	728 32	493 00	2,091 57	1,456 67	1,097 00
Hamilton	89	55	7	2	153	4,994 37	2,490 00	17,288 74	9,988 74	7,780 00
Hastings, East	27	2	.....	.....	29	403 40	294 00	1,506 77	806 77	616 00
Hastings, North	24	6	.....	.....	30	444 01	312 00	1,127 98	887 98	708 00
Hastings, West	39	7	3	1	50	1,427 09	815 00	5,179 98	2,854 15	2,425 00
Huron, East	37	1	.....	.....	38	585 55	382 00	1,461 14	1,171 14	778 00
Huron, South	45	7	.....	.....	52	990 41	591 00	2,840 79	1,980 79	1,359 00
Huron, West	46	7	.....	.....	53	1,121 85	720 00	3,293 70	2,243 70	1,770 00
Kent, East	43	6	.....	.....	49	900 26	538 00	2,815 57	1,800 57	1,212 00
Kent, West	26	7	.....	.....	33	558 88	443 00	6,557 77	1,117 77	1,117 00
Kingston	64	20	2	.....	86	2,724 21	1,570 00	9,148 41	5,448 41	4,950 00
Lambton, East	29	7	.....	1	37	478 77	374 00	2,252 53	957 53	846 00
Lambton, West	43	15	.....	.....	58	994 03	745 00	2,898 06	1,998 06	1,885 00
Lanark, North	18	2	.....	.....	20	299 99	232 00	1,110 00	600 00	528 00
Lanark, South	18	4	.....	.....	22	363 50	285 00	2,002 01	727 01	705 00
Leeds and Grenville, North, and South Grenville	36	6	.....	.....	42	787 73	503 00	3,160 43	1,575 43	1,187 00
Lennox	18	4	.....	.....	22	397 88	292 00	1,875 72	795 72	728 00
Lincoln	63	14	.....	5	82	1,890 53	1,136 00	5,157 38	3,781 13	3,204 00
London	45	24	2	1	72	2,350 90	1,238 00	6,028 47	4,701 79	3,962 00

Middlesex, East	71	8	.....	1	80	1,585 03	806 00	4,025 06	3,170 06	1,724 00
Middlesex, North	32	6	.....	.....	38	619 19	392 00	1,822 15	1,238 40	868 00
Middlesex, West	35	4	.....	.....	39	685 65	454 00	2,131 28	1,371 28	1,036 00
Monck	18	2	.....	.....	20	258 01	204 00	1,036 04	516 04	436 00
Muskoka and Parry Sound	45	4	.....	1	50	1,482 20	838 00	1,260 81	1,160 81	712 00
Nipissing	11	8	.....	.....	19	1,439 75	730 00	.....	.....	.....
Norfolk	55	6	.....	.....	61	1,123 75	686 00	2,607 48	2,247 48	1,544 00
Northumberland, East	24	6	.....	1	31	426 71	312 00	1,335 93	853 43	708 00
Northumberland, West	26	5	.....	1	32	690 94	412 00	2,694 38	1,381 88	1,018 00
Ontario, North	38	9	.....	.....	47	790 55	488 00	2,501 05	1,581 05	1,102 00
Ontario, South	28	3	.....	.....	31	605 87	430 00	2,371 78	1,211 78	1,060 00
Ottawa	75	77	.....	1	153	4,777 90	2,474 00	13,330 80	9,555 80	7,776 00
Oxford, North	38	7	.....	.....	45	906 61	563 00	2,503 22	1,813 22	1,357 00
Oxford, South	35	6	.....	.....	41	845 15	557 00	3,275 34	1,690 34	1,383 00
Peel	36	5	.....	1	42	714 86	470 00	2,053 47	1,429 72	1,080 00
Perth, North	64	13	.....	.....	77	1,575 91	1,001 00	5,601 86	3,151 85	2,459 00
Perth, South	42	6	.....	.....	48	976 24	612 00	3,019 99	1,952 49	1,468 00
Peterborough, East	19	4	.....	1	24	296 62	238 00	753 33	593 33	532 00
Peterborough, West	27	10	.....	.....	37	882 79	517 00	3,925 58	1,765 58	1,343 00
Prescott	36	5	.....	.....	41	684 69	420 00	1,769 37	1,369 37	910 00
Prince Edward	24	3	.....	1	28	502 54	326 00	1,675 09	1,005 09	764 00
Renfrew, North	21	8	.....	.....	29	653 67	377 00	1,727 35	1,307 35	963 00
Renfrew, South	26	9	.....	.....	35	553 30	368 00	1,241 60	1,106 60	862 00
Russell	28	.....	.....	.....	28	556 94	280 00	1,113 90	1,113 90	560 00
Simcoe, East	36	3	1	.....	40	725 72	444 00	2,106 45	1,451 45	1,004 00
Simcoe, South	36	5	.....	.....	41	646 88	420 00	1,573 74	1,293 74	910 00
Simcoe, West	50	11	.....	.....	61	1,196 20	788 00	3,672 39	2,392 39	1,938 00
Stormont	14	2	.....	.....	16	246 18	164 00	492 37	492 37	356 00
Thunder Bay	12	4	1	.....	17	333 96	206 00	1,320 61	570 61	354 00
Toronto	210	95	15	1	321	10,053 73	5,390 00	35,407 45	20,107 45	16,560 00
Victoria, North, and Haliburton	34	1	.....	1	36	500 72	352 00	1,081 44	1,001 44	718 00
Victoria, South	28	3	.....	.....	31	554 56	422 00	2,869 07	1,109 07	1,028 00
Waterloo, North	46	9	.....	.....	55	1,160 87	682 00	2,601 76	2,321 76	1,648 00
Waterloo, South	42	7	.....	.....	49	917 34	568 00	2,614 69	1,834 69	1,322 00
Welland	78	19	.....	4	101	2,038 17	1,200 00	5,023 81	4,076 31	2,930 00
Wellington, Centre	37	6	.....	.....	43	730 52	442 00	1,741 03	1,461 03	968 00
Wellington, South	39	8	.....	.....	47	1,153 51	686 00	4,256 94	2,306 94	1,944 00
Wellington, West	58	10	.....	.....	68	1,401 96	871 00	4,223 90	2,803 90	2,119 00
Wentworth, North	34	4	.....	.....	38	670 63	459 00	1,981 30	1,341 30	1,071 00
Wentworth, South	21	2	.....	.....	23	327 25	234 00	674 54	654 54	496 00
York, East	44	6	.....	.....	50	827 12	512 00	3,734 26	1,654 26	1,108 00
York, North	41	8	.....	.....	49	917 15	556 00	2,690 55	1,834 30	1,294 00
York, West	33	7	.....	.....	50	863 59	514 00	3,347 19	1,727 19	1,126 00
Totals	3,311	764	34	30	4,139	89,758 75	53,730 00	276,983 79	173,762 62	133,704 00

NOTE.—The issue of Wholesale and Six Months' Licenses not having been provided for under the Act of 1868-9, no regard has been had to them, but only to the Tavern and Shop Licenses, in the computation of the amount that *would* have been paid to the Government and to the Municipality respectively under that Act. The aggregate amounts actually paid in respect of such Wholesale and Six Months' Licenses in 1881-2 were —to the Government, $1,751.50; and to the Municipalities, $3,854.50, including excess beyond the statutory duties, or $3,502 excluding such excess.

SCHEDULE C.

SPECIMEN COPIES of the Statements of Receipts and Expenditure on account of the License Funds of the several License Districts of the Province, for the year ending the 30th day of April, 1882, as furnished to the Treasurers of the respective Municipalities for the information of the Municipal Councils.

GLENGARRY.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable after deducting expenses in the proportion of one-third to the Province and two-thirds to the Municipalities):		Inspector's salary, including travelling expenses	500 00
Township (including Village) Licenses:		Commissioners' travelling expenses in attending meetings of the Board	10 30
31 Tavern	1,860 00	Printing blank books and forms, licenses, rules and regulations, etc.	7 25
7 Shop	420 00	Advertising in newspapers	1 50
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	190 00	Fees in unsuccessful cases, where the Court certifies that the Inspector had reasonable ground of action:	
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	40 00	Magistrates	1 30
		Constables	5 45
		Witnesses	1 00
		Sundry expenses	3 00
		DISTRIBUTION OF RESIDUE OF FUND.	
		Hon. Provincial Treasurer, one-third proportion and Vessel Licenses (1st Distribution. $573 34; 2nd Distribution. $73 39)	646 73
		Municipalities, two-thirds proportion, and excess over Statutory Duties:	
		Lochiel (1st Distribution. 341 75; 2nd Distribution. 43 87)	385 62
		Charlottenburgh (1st Distribution. 331 93; 2nd Distribution. 50 35)	382 28
		Kenyon (1st Distribution. 181 05; 2nd Distribution. 17 95)	199 00
		Lancaster (1st Distribution. 331 93; 2nd Distribution. 34 64)	366 57
Total	2,510 00	Total	2,510 00

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

SOUTH GREY.

RECEIPTS.	$ c.
Statutory License Duties (payable after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):	
Town Licenses:	
4 Tavern	320 00
1 Shop	80 00
Township (including Village) Licenses.	
20 Tavern	1,200 00
1 " Beer and Wine	30 00
5 Shop	300 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	120 00
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	150 00
Miscellaneous:	
Fees—7 transfers and 1 removal	40 00
Mileage *re* transfers	6 20
Total	2,246 20

PAYMENTS.	$ c.
Inspector's salary, including travelling expenses	450 00
Printing blank books and forms, licenses, rules and regulations, etc.	7 25
Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action:	
Magistrates	8 30
Constables	17 60
Witnesses	8 90
Fees in cases of conviction where the defendents failing to pay, and having no means, were, in default, imprisoned, or absconded, etc.:	
Constables	14 50
Expenses *re* transfers	6 20

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	405 00	122 82	527 82
Municipalities, two-thirds proportion, and excess over Statutory Duties:			
Durham	276 86	77 71	354 57
Normanby	247 82	83 01	330 83
Bentinck	167 50	67 36	234 86
Glenelg	165 21	19 14	184 35
Egremont	82 61	18 41	101 02
Total			2,246 20

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

HALTON.

RECEIPTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province and two-thirds to the Municipalities):	
Town Licenses:	
9 Tavern	720 00
1 Shop	80 00
Township (including Village) Licenses:	
39 Tavern; 1 Six Months'	1,950 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	40 00
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	635 00
Miscellaneous:	
2 transfer fees	10 00
Mileage *re* transfers	1 20
Total	3,436 20

PAYMENTS.			$ c.
Inspector's salary, including travelling expenses			499 92
Commissioners' travelling expenses in attending meetings of the Board			14 30
Postages and stationery of Inspector and Commissioners			8 47
Printing blank books and forms, licenses, rules and regulations, etc.			7 25
Advertising in newspapers			2 00
Fees and disbursements of Counsel, where necessarily employed in special cases			15 00
Fees in unsuccessful cases, where the Court certifies that the Inspector had reasonable ground of action:			
Magistrates			2 55
Constables			20 35
Witnesses			1 00
Fees in cases of conviction where the defendants failing to pay, and having no means, were, in default, imprisoned or absconded, etc.			
Constables			27 42
Other costs			10 85
Sundry expenses			7 20
DISTRIBUTION OF RESIDUE OF FUND.			
	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	$680 00	$48 32	728 32
Municipalities, two-thirds proportion and excess over Statutory Duties:			
Oakville	362 67	17 43	380 10
Esquesing	242 00	46 47	288 47
Trafalgar	212 00	5 27	217 27
Milton	321 80	17 69	339 49
Georgetown	201 67	6 99	208 66
Burlington	281 33	3 51	284 84
Acton	136 00	2 63	138 63
Nelson	136 53	3 95	140 48
Nassagaweya	91 00	2 63	93 63
Total			3,436 20

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

HAMILTON.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities) :		Inspector's salary, including travelling expenses	900 00
		Postages and stationery of Inspector and Commissioners	14 49
		Printing blank books and forms, licenses, rules and regulations, etc.	21 75
		Advertising in newspapers	8 75
City Licenses :		Fees and disbursements of Counsel, where necessarily employed in special cases	115 00
87 Tavern	8,700 00		
2 Beer and Wine	100 00		
2 Beer and Wine, six months	50 00	Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action :	
55 Shop, 4 Extended Shop	5,600 00	Witnesses	20 50
7 Wholesale	1,050 00	Fees in cases of conviction where the defendants failing to pay, and having no means, were, in default, imprisoned, or absconded, etc. :	
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	659 00	Witnesses	3 00
		Detective Service	42 80
Excess, over and above the Statutory Duties, (payable in full to the Municipalities)	7,300 00	Sundry expenses :	
		Inspecting (proportionate share)	24 73
		Caretaker of office	18 00
Miscellaneous :		Office rent	56 25
Fees—24 transfers and 1 removal	125 00	Fuel for office	11 70
		Office furniture, fittings and repairs	63 92
		DISTRIBUTION OF RESIDUE OF FUND.	
		1st Distribution. / 2nd Distribution.	
		Hon. Provincial Treasurer, one-third proportion and Vessel Licenses $3,968 33 / $1,026 04	4,994 37
		Municipalities, two-thirds proportion, and excess over Statutory Duties :	
		Hamilton 14,161 67 / 3,127 07	17,288 74
Total	23,584 00	Total	23,584 00

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

KINGSTON.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):		Inspector's salary, including travelling expenses	799 92
		Postages and stationery of Inspector and Commissioners	6 48
		Printing blank books and forms, licenses, rules and regulations, etc.	12 75
City Licenses:			
62 Tavern	6,200 00	Advertising in newspapers	23 00
2 " Beer and Wine	100 00		
20 Shop	2,000 00	Fees and disbursements of Counsel, where necessarily employed in special cases	50 00
2 Wholesale	300 00		
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	460 00	Sundry expenses	25 23
11 Vessel Licenses, (papable in full to the Province)	1,020 00		
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	3,700 00	DISTRIBUTION OF RESIDUE OF FUND.	
Miscellaneous:			1st Distribution. 2nd Distribution.
6 transfer fees	30 00	Hon. Provincial Treasurer, one-third proportion and vessel Licenses	3,306 67 437 54 3,744 21
		Municipalities, two-thirds proportion, and excess over Statutory Duties:	
		Kingston City	8,793 33 355 08 9,148 41
Total	13,810 00	Total	13,810 00

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

EAST LAMBTON.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province and two-thirds to the Municipalities):		Inspector's salary, including travelling expenses	450 00
		Commissioners travelling expenses in attending meetings of the Board	8 10
Township (including Village) Licenses:			
28 Tavern, 1 Six Months'	1,425 00	Postages and stationery of Inspector and Commissioners	15 50
1 " Beer and Wine	30 00		
7 Shop	350 00	Printing blank books and forms, licenses, rules and regulations, etc.	7 25
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	100 00	Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action:	
		Magistrates	6 40
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,295 00	Constables	17 95
		Witnesses	5 50
Miscellaneous	0 10	Expenses *re* transfers	7 10
Fees, 5 transfers and 1 removal	30 00		
Mileage *re* transfers and removal	9 00		
4 licenses under Scott Act (2 months)	10 00		

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	$375 00	$103 77	478 77
Municipalities, two-thirds proportion, and excess over Statutory Duties:			
Forest	512 17	28 46	540 63
Watford	470 43	18 02	488 45
Thedford	346 95	36 75	383 70
Wyoming	125 22	53 75	178 97
Euphemia	110 22	9 01	119 23
Alvinston	95 22	18 91	114 13
Arkona	143 48	8 48	151 96
Bosanquet	30 87	1 50	32 37
Warwick	43 48	6 01	49 49
Brooke	21 74	5 47	27 21
Plympton	125 22	41 17	166 39
Total			3,249 10

Total	3,249 10

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

WEST LAMBTON.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting Expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):		Inspector's Salary, including travelling expenses	450 00
		Commissioners' travelling expenses in attending meetings of the Board	7 30
		Postages and Stationery of Inspector and Commissioners	12 15
Town Licenses:		Printing blank books and forms, licenses, rules and regulations, etc.	10 25
17 Tavern	1,143 39	Fees and Disbursements of Counsel, where necessarily employed in special cases	20 00
9 Shop	599 69	Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action:	
Township (including Village) Licenses:		Magistrates	3 30
25 Tavern	1,250 00	Constables	8 55
1 " Beer and Wine	25 00	Witnesses	4 80
6 Shop	300 00	Expenses *re* transfers	2 50
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	98 70		
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	900 00		
Miscellaneous:			
14 transfer fees	70 00		
Mileage *re* transfers	12 50		
2 Town Shop and 2 Township Shop Licenses under Scott Act (for 2 months)	11 66		
Total	4,410 94	Total	4,410 94

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	851 58	142 45	994 03
Municipalities, two-thirds proportion, and excess over Statutory Duties:			
Sarnia, Town	1,155 91	43 57	1,199 48
Petrolia	413 95	114 00	527 95
Point Edward	321 47	18 62	340 09
Sarnia, Township	36 99	1 59	38 58
Moore	296 93	37 58	334 51
Enniskillen	80 98	4 79	85 77
Oil Springs	53 99	3 20	57 19
Sombra	242 94	42 96	285 90
Dawn		28 59	28 59
Total			4,410 94

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

SOUTH LANARK.

RECEIPTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province and two-thirds to the Municipalities):	
Town Licenses:	
7 Tavern	560 00
3 Shop	240 00
Township (including Village) Licenses:	
11 Tavern	660 00
1 Shop	60 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	40 00
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,275 00
Miscellaneous:	
2 transfer fees	10 00
Mileage *re* transfers	3 90
Total	2,848 90

PAYMENTS.			$ c.
Inspector's salary, including travelling expenses			450 00
Postages and stationery of Inspector and Commissioners			14 54
Printing blank books and forms, licenses, rules and regulations, etc.			7 25
Advertising in newspapers			8 00
Expenses *re* transfers			3 60
DISTRIBUTION OF RESIDUE OF FUND.			
	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	$306 66	$56 84	363 50
Municipalities, two-thirds proportion and excess over Statutory Duties:			
Perth	1,022 83	47 64	1,070 47
Smith's Falls	710 25	23 76	734 01
Drummond	58 42	9 46	67 88
Beckwith	48 42	7 15	55 57
Bathurst	24 21	3 57	27 78
South Sherbrooke	24 21	3 57	27 78
North Elmsley	....	18 52	18 52
Total			2,848 90

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

LENNOX.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities) :		Inspector's salary, including travelling expenses	450 00
		Printing blank books and forms, licenses, rules and regulations, etc.	8 75
Town Licenses :			
7 Tavern	560 00	Advertising in Newspapers	17 50
1 " Beer and Wine	40 00		
2 Shop	160 00	Fees and disbursements of Counsel, where necessarily employed in special cases	35 00
Township (including village) Licenses :			
10 Tavern	600 00	Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action :	
2 Shop	120 00		
		Constables	10 95
Fines collected during the year (payable, after deducting expenses, in same proportion as the Statutory Duties)	223 55	Witnesses	4 30
		Fees in cases of conviction where the defendants failing to pay, and having no means, were, in default, imprisoned or absconded, etc. :	
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,080 00	Constables	3 45
Miscellaneous :			
4 transfer fees	20 00	Expenses *re* transfers	2 90
Mileage *re* transfers	2 90		

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	280 00	117 88	397 88
Municipalities, two-thirds proportion, and excess over Statutory Duties :			
Napanee	1,369 00	144 68	1,504 68
Earnestown	116 67	33 35	150 02
Bath	93 33	17 45	110 78
Amherst Island	46 67	11 04	57 71
Adolphustown	23 33	19 97	43 30
Richmond		9 23	9 23
Total			2,806 45
Total	2,806 45		

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

LONDON.

8

RECEIPTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):	
City Licenses:	
45 Tavern; 4 Extended Tavern; 1 Six Months' Tavern (Beer and Wine)	4,600 00
24 Shop; 1 Extended Shop	2,425 00
2 Wholesale	300 00
Fines collected during the year (payable, after deducting expenses, in same proportion as the Statutory Duties)	1,091 55
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,326 68
Miscellaneous	0 01
9 transfer fees	45 00
Total	9,788 24

PAYMENTS.	$ c.
Inspector's salary, including travelling expenses	800 00
Postages and stationery of Inspector and Commissioners	4 45
Printing blank books and forms, licenses, rules and regulations, etc.	7 25
Advertising in newspapers	14 60
Fees and disbursements of Counsel, where necessarily employed in special cases	202 10
Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action:	
Constables	14 15
Witnesses	17 50
Detective service	226 56
Other costs	1 75
Sundry expenses:	
Rent of office	80 00
Gas fittings and coal	15 78
Inspecting (proportionate share)	24 73

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion, and Vessel Licenses	1,975 00	375 90	2,350 90
Municipalities, two-thirds proportion, and excess over Statutory Duties:			
City of London	5,266 68	761 79	6,028 47
Total			9,788 24

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

MUSKOKA AND PARRY SOUND.

RECEIPTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province and two-thirds to the Municipalities):	
Township (including Village) Licenses:	
45 Tavern; 1 Extended Tavern; 1 Six Months'	2,745 00
4 Shop	240 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	159 87
Excess, over and above the Statutory duties (payable in full to the Municipalities)	100 00
Miscellaneous:	
7 transfer fees	35 00
Mileage *re* transfers	22 00
Total	3,301 87

PAYMENTS.			$ c.
Inspector's salary, including travelling expenses			500 00
Commissioners' travelling expenses in attending meetings of the Board			14 50
Postages and stationery of Inspectors and Commissioners			3 21
Printing blank books and forms, licenses, rules and regulations, etc.			7 25
Advertising in newspapers			3 00
Fees in unsuccessful cases where the Court certifies that the Inspector had reasonable ground of action:			
Magistrates			1 20
Constables			2 70
Detective service			5 00
Expenses *re* transfers			22 00
DISTRIBUTION OF RESIDUE OF FUND.			
	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses (including duties collected in unorganized territory)	$1,254 67	$227 53	1,482 20
Municipalities, two-thirds proportion and excess over Statutory Duties:			
Bracebridge	303 33	11 09	314 42
McLean and Ridout	42 00	1 25	43 25
Gravenhurst	224 00	36 43	260 43
Macaulay	96 00	3 74	99 74
Humphrey	96 00	20 37	116 37
Draper and Oakley	64 00	2 49	66 49
Foley	64 00	27 36	91 36
Stephenson	64 00	2 49	66 49
Armour	64 00	2 49	66 49
Morrison	32 00	1 25	33 25
Medora and Wood	32 00	4 02	36 02
McKellar	32 00	1 25	33 25
Stisted	32 00	1 25	33 25
Total			3,301 87

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

WEST NORTHUMBERLAND.

RECEIPTS.	$ c.	PAYMENTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):		Inspector's Salary, including travelling expenses	450 00
		Commissioners' Travelling Expenses in attending meetings of the Board	15 00
Town Licenses:			
12 Tavern, 2 Extended Tavern	1,000 00	Postage and Stationery of Inspector and Commissioners	4 93
5 Shop	400 00		
		Printing blank books and forms, licenses, rules and regulations, etc.	7 25
Township (including Village) Licenses:			
14 Taverns, 1 Six Months'	870 00	Fees and Disbursements of Counsel, where necessarily employed in special cases	30 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	290 00		
		DISTRIBUTION OF RESIDUE OF FUND.	
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,312 50		
Miscellaneous:			
4 transfer fees	20 00	Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	556 67 134 27 690 94
		Municipalities, two-thirds proportion, and excess over Statutory Duties:	
		Cobourg	1,999 13 194 49 2,193 62
		Hamilton	205 99 37 69 243 68
		Haldimand	117 71 10 83 128 54
		South Monaghan	58 85 5 41 64 26
		Alnwick	44 15 20 15 64 28
Total	3,892 50	Total	3,892 50

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

PRESCOTT.

RECEIPTS.	$ c.	PAYMENTS.			
Statutory License Duties (payable after deducting expenses in the proportion of one-third to the Province and two-thirds to the Municipalities):		Inspector's salary, including travelling expenses			450 00
		Postages and stationery of Inspectors and Commissioners			6 69
		Printing blank books and forms, licenses, rules and regulations, etc			9 25
Township (including Village) Licenses:					
36 Tavern	2,160 00				
5 Shop	300 00				
		DISTRIBUTION OF RESIDUE OF FUND.			
			1st Distribution.	2nd Distribution.	
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	60 00				
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	400 00	Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	$616 67	$68 02	684 69
		Municipalities, two thirds proportion and excess over Statutory Duties:			
		West Hawkesbury	354 17	8 85	363 02
		L'Orignal	203 33	7 08	210 41
		Hawkesbury Village	212 50	5 31	217 81
		North Plantagenet	215 83	23 27	239 10
		East Hawkesbury	185 00	10 63	195 63
		South Plantagenet	185 00	21 49	206 49
		Caledonia	123 33	7 08	130 41
		Longueuil	61 67	3 54	65 21
		Alfred	92 50	48 79	141 29
Total	2,920 00	Total			2,920 00

SCHEDULE G.—Specimen copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

NORTH VICTORIA AND HALIBURTON.

RECEIPTS.	$ c.
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province and two-thirds to the Municipalities):	
Township (including Village) Licenses:	
26 Tavern	1,560 00
1 Shop	60 00
Total	1,620 00

PAYMENTS.	$ c.
Inspector's salary, including travelling expenses	450 00
Postages and stationery of Inspectors and Commissioners	9 90
Printing blank books and forms, licenses, rules and regulations, etc.	7 25

DISTRIBUTION OF RESIDUE OF FUND.

	1st Distribution.	2nd Distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	$320 00	64 29	384 29
Municipalities, two-thirds proportion and excess over Statutory Duties:			
Snowdon	.....	28 47	28 47
Eldon	270 77	42 34	313 11
Dysart	73 85	11 55	85 40
Somerville	73 85	11 55	85 40
Bexley	49 24	7 70	56 94
Minden	49 24	7 70	56 94
Laxton and Digby	24 61	3 85	28 46
Glamorgan	24 61	3 85	28 46
Anson	24 61	3 85	28 46
Sherborne	24 61	3 85	28 46
Dalton	24 61	3 85	28 46
Total			1,620 00

SCHEDULE G.—Specimen Copies of the Statements of Receipts and Expenditure, etc.—*Continued.*

SOUTH WELLINGTON.

RECEIPTS.	
Statutory License Duties (payable, after deducting expenses, in the proportion of one-third to the Province, and two-thirds to the Municipalities):	
City Licenses:	
18 Tavern	1,800 00
8 Shop	800 00
Township (including village) Licenses:	
21 Tavern	1,260 00
Fines collected during the year (payable, after deducting expenses, in same proportions as the Statutory Duties)	60 00
Excess, over and above the Statutory Duties (payable in full to the Municipalities)	1,950 00
Miscellaneous:	
2 transfer fees	10 00
Mileage *re* transfers	1 10
Total	5,881 10

PAYMENTS.			
Inspector's salary, including travelling expenses			450 00
Postages and stationery of Inspector and Commissioners			3 00
Printing blank books and forms, licenses, rules and regulations, etc.			16 00
Advertising in newspapers			1 65
DISTRIBUTION OF RESIDUE OF FUND.	1st distribution.	2nd distribution.	
Hon. Provincial Treasurer, one-third proportion and Vessel Licenses	971 68	181 83	1,153 51
Municipalities, two-thirds proportion, and excess over Statutory Duties:			
Guelph City	2,996 57	503 11	3,499 68
Eramosa	306 85	57 11	363 96
Puslinch	232 21	17 27	249 48
Guelph Township	132 69	11 13	143 82
Total			5,881 10

FOR SCHEDULE "H,"

See next page.

SCHE

BEING a synopsis of the latest returns in possession of the Department, shewing the applicants, respectively, during

LICENSE DISTRICT.	Total number of Licenses granted to Reformers.					Total number of Licenses granted to Conservatives.				
	Tavern.	Shop.	Six months.	Wholesale.	Total.	Tavern.	Shop.	Six months.	Wholesale.	Total.
Addington	20	1	.....	.....	21	20	1	....	.....	21
Algoma	4	2	....	.....	6	8	3	.....	.....	11
Brant, North	4	1	....	.....	5	13	1	.....	.....	14
" South	11	3	.....	.....	14	24	9	.....	1	34
Brockville and South Leeds	25	4	.....	.....	29	32	9	.....	1	42
Bruce, North	12	4	.....	.....	16	17	1	.....	.....	18
" South	9	1	.....	.....	10	52	7	.....	.....	59
Cardwell	13	3	.....	.....	16	21	2	.....	.....	23
Carleton	4	....	.....	.....	4	22	1	.....	.....	23
Cornwall	7	2	.....	.....	9	10	2	.....	.....	12
Dufferin	1	1	.....	.....	2	29	5	.....	.....	34
Dundas	7	4	.....	.....	11	18	.....	1	.....	19
Durham, East	5	2	.....	.....	7	22	2	.....	.....	24
" West	3	.....	.....	.....	3	16	4	.....	.....	20
Elgin	16	2	.....	.....	18	54	10	1	.....	65
Essex, North	8	2	.....	.....	10	32	9	.....	2	43
" South	6	1	.....	.....	7	15	3	1	.....	19
Frontenac	2	.....	.....	.....	2	13	.....	.....	.....	13
Glengarry	5	1	.....	.....	6	12	6	.....	.....	18
Grey, East	9	....	.....	.....	9	18	3	.....	.....	21
" North	4	.....	.....	.....	4	22	6	.....	1	29
" South	8	3	.....	.....	11	18	3	.....	.....	21
Haldimand	14	.....	.....	.....	14	26	3	.....	.....	29
Halton	15	.....	.....	.....	15	31	1	1	.....	33
Hamilton	19	10	1	2	32	52	48	.....	5	105
Hastings, East	10	.....	.....	.....	10	18	1	.....	.....	19
" North	6	3	.....	.....	9	15	2	.....	.....	17
" West	9	1	.....	.....	10	29	8	1	3	41
Hnron, East	5	1	.....	.....	6	34	.....	.....	.....	34
" South	11	.....	.....	.....	11	32	8	.....	.....	40
" West	11	2	.....	.....	13	37	5	.....	.....	42
Kent, East	16	2	.....	.....	18	20	5	.....	.....	25
" West	3	1	.....	.....	4	25	4	.....	.....	29
Kingston	13	6	.....	2	21	36	11	.....	1	48
Lambton, East	1	4	.....	.....	5	27	5	1	.....	33
" West	11	7	.....	.....	18	27	8	.....	.....	35
Lanark, North	5	1	.....	.....	6	13	1	.....	.....	14
" South	6	.....	.....	.....	6	10	6	.....	.....	16
Leeds and Grenville, North, and South Grenville	12	6	.....	.....	18	28	2	.....	.....	30
Lennox	4	.....	.....	.....	4	11	3	.....	.....	14
Lincoln	24	4	1	.....	29	39	7	2	.....	48
London	11	5	.....	.....	16	29	20	.....	2	51
Middlesex, East	28	5	.....	.....	33	40	3	.....	.....	43
" North	10	3	.....	.....	13	24	3	.....	.....	27
" West	10	1	.....	.....	11	23	3	.....	.....	26
Monck	5	.....	.....	.....	5	10	2	.....	.....	12
Muskoka and Parry Sound	16	1	1	.....	18	21	1	.....	.....	22
Nipissing	.....	.....	.....	.....	.....	1	1	.....	.....	2
Norfolk	23	.....	.....	.....	23	28	6	....	.....	34
Northumberland, East	8	2	.....	.....	10	11	2	.....	.....	13
" West	5	1	.....	.....	6	20	3	1	.....	24
Ottawa	24	33	.....	.....	57	34	28	.....	.....	62
Ontario, North	14	2	.....	.....	16	26	5	.....	.....	31
Carried forward	....	....	.....	.....	.....	.....	.....	.....	.....	.....

DULE H.

number of Licenses granted or refused to Reformers, Conservatives, and Non-political the License Year 1880–1.

Total number of Licenses granted to Non-political applicants.					Total number of Reform applicants refused Licenses.					Total number of Conservative applicants refused Licenses.					Total number of Non-political applicants refused Licenses.				
Tavern.	Shop.	Six months.	Wholesale.	Total.	Tavern.	Shop.	Six months.	Wholesale.	Total.	Tavern.	Shop.	Six months.	Wholesale.	Total.	Tavern.	Shop.	Six months.	Wholesale.	Total.
.....	....	....	....	.....	1	....	....	....	1	3	....	....	....	3	....	....	....	....	....
1	....	....	....	1	1	....	..	....	1	..	..	....	.	....	....	....	.	....	..
3	....	...	....	3	1	....	....	....	1	1	....	....	....	1	....	....	....	....	....
1	....	...	...	1	3	....	....	....	3	5	....	...	....	5	....	1	....	....	1
.....	...	..	....	.....	5	....	....	....	5	3	....	....	....	3	....	....	....	....	....
5	....	..	....	5	2	....	....	....	2	2	....	....	....	2	.	....	....	....	....
1	....	....	....	1	3	....	....	....	3	5	....	....	....	5	1	1	....	....	2
6	....	....	..	6	3	...	....	...	3	2	....	....	....	2	....	1	....	....	1
5	1	....	....	6	.....	....	....	....	.....	..	....	....	....	..	1	....	....	....	1
5	1	....	....	6	2	....	....	....	2	2	....	....	....	2	1	....	....	....	1
.....	....	....	...	.....	.....	....	....	....	.....	3	....	....	....	3	1	....	....	....	1
.....	....	....	....	.....	.....	..	....	....	.....	..	....	....	....	..	1	....	....	....	1
5	1	..	....	6	.....	....	....	....	.....	2	....	....	....	2	..	....	....	....	....
...	....	...	...	.....	1	....	....	....	1	2	....	....	....	2	....	....	....	....	....
2	....	....	....	2	1	....	....	....	1	1	....	....	....	1	....	....	....	....	....
6	....	....	....	6	2	1	....	....	3	3	....	....	....	3	5	....	....	....	5
1	....	....	....	1	1	....	....	....	1	..	....	....	....	..	1	....	....	....	1
2	....	....	....	2	1	....	...	....	1	3	....	....	....	3	1	....	....	....	1
11	....	....	....	11	1	....	....	....	1	1	....	....	....	1	2	....	....	....	2
4	....	....	....	4	1	...	....	....	1	1	....	....	....	1	....	....	....	....	....
2	....	....	....	2	1	....	....	....	1	6	1	....	....	7	....	....	....	....	....
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...	....	....	....	.. ..	.....	1	....	....	1	1	....	....	....	1	....	....	....	....	....
1	....	....	....	1	.....	....	....	....	.....	5	....	....	....	5	....	....	....	....	....
3	2	...	....	5	11	1	1	....	13	6	1	....	....	7	2	....	....	....	2
1	....	....	....	1	1	....	....	....	1	1	....	....	....	1	....	....	....	....	....
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11	2	....	....	13	.....	....	....	....	.....	7	....	....	....	7	2	....	....	....	2
1	....	....	....	1	.....	....	....	....	.....	2	....	....	....	2	....	....	....	....	....
5	1	....	....	6	.....	....	....	....	.....	.....	....	....	....	.....	1	....	....	....	1
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5	1	....	....	6	6	5	....	....	11	10	7	....	....	17	3	3	....	....	6
.....	....	....	....	.....	8	....	....	....	8	10	2	....	....	12	....	....	....	....	....
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5	2	....	....	7	...	....	....	....	.....	.....	....	....	....	.....	....	....	....	....	....
2	....	....	....	2	.....	....	....	....	.....	.....	....	....	....	.....	....	....	....	....	....
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3	1	....	....	4	.....	....	....	....	.....	3	1	....	....	3	....	....	....	....	....
17	12	...	....	29	5	1	1	....	7	1	2	....	....	3	1	4	....	....	5
.....	....	....	....	.....	1	....	....	....	1	1	1	....	....	2	....	....	....	....	....
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BEING a synopsis of the latest returns in possession of the Department, shewing the applicants, respectively, during the

LICENSE DISTRICT.	Total number of Licenses granted to Reformers.					Total number of Licenses granted to Conservatives.				
	Tavern.	Shop.	Six Months.	Wholesale.	Total.	Tavern.	Shop.	Six Months.	Wholesale.	Total.
Ontario, South	7	1			8	20	2			22
Oxford, North	11	2			13	23	4			27
" South	14	1			15	21	6			27
Peel	10	1	1		12	22	3			25
Perth, North	14	8			22	47	4			51
" South	14	3			17	30	3			33
Peterborough, East	2				2	16	3	1		20
" West	3	4			7	23	5			28
Prescott		1			1	37	6			43
Prince Edward	5	1	1		7	18	1			19
Renfrew, North	6	5			11	15	5			20
" South	3	4			7	16	5			21
Russell	4				4	18				18
Simcoe, East	11	2			13	20	1		1	22
" South	11	2			13	23	4			27
" West	15	4			19	39	7			46
Stormont	3	2			5	10				10
Thunder Bay		1			1	4	1	1	1	7
Toronto	50	38		7	95	140	54	1	10	205
Victoria, North, and Haliburton	8				8	15	1			16
" South	10	1	1		12	24	3			27
Waterloo, North	4	1			5	36	7			43
" South	4	3			7	39	4			43
Welland	26	9	1		36	55	21	2		78
Wellington, Centre	7	3			10	27	3			30
" South	11	3			14	26	7			33
" West	19	5			24	33	5			38
Wentworth, North	5				5	18	3			21
" South	9				9	16	2			18
York, East	5				5	35	5			40
" North	11	1			12	25	6			31
" West	5	1			6	30	3			33
Totals	839	245	7	11	1102	2186	476	14	28	2704

DULE H.

number of Licenses granted or refused to Reformers, Conservatives, and Non-political License Year 1880–1.——*Continued.*

Total number of Licenses granted to Non-political applicants.					Total number of Reform applicants refused Licenses.					Total number of Conservative applicants refused Licenses.					Total number of Non-political applicants refused Licenses.				
Tavern.	Shop.	Six Months.	Wholesale.	Total.	Tavern.	Shop.	Six Months.	Wholesale.	Total.	Tavern.	Shop.	Six Months.	Wholesale.	Total.	Tavern.	Shop.	Six Months.	Wholesale.	Total.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	1	.....	.....	.....	1
2	.....	.....	.....	2	1	..	...	.....	1	2	.....	.....	..	2	.....	.....	..	.....	.....
4	.....	.....	.....	4	1	.....	.....	.....	1	2	.....	.....	.....	2	.....	.....	...	.....	.....
6	.....	.....	.....	6	3	.....	.....	.....	3	2	.....	.....	.....	2	.....	.....	.....	.....	.....
1	.....	.....	.....	1	2	.....	...	.....	2	10	.....	.....	.....	10	3	.....	.....	.....	3
2	..	.....	.....	2	.....	.....	.....	..	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
1	.....	.....	.....	1	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....
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.....	.....	.....	.....	.....	2	2	.....	.....	4	1	1	.....	..	2	.....	.....	...	.....	.....
2	1	...	...	3	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	1	2	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	1
5	.....	.....	.....	5	2	.....	.....	.....	2	4	.....	.....	.....	4	2	.....	.....	.....	2
6	.....	.....	.....	6	1	1	.....	.....	2	2	1	.....	.....	3	.....	.....	.....	.....	.....
.....	.....	.....	.....	...	1	1	.....	.. .	2	2	.....	..	.....	2	.....	.....	.....	.....	.....
2	.....	.....	.....	2	2	.....	.....	.....	2	1	4	.....	.....	5	.....	.	..	.....	.....
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5	1	1	.....	7	.....	.....	...	.....	.....	1	.....	.....	.....	1	3	.....	...	.....	3
14	.....	.....	.....	14	13	20	.....	...	33	17	20	.....	.....	37	16	.....	.....	.....	16
.....	.....	.....	...	.....	2	.....	.....	.....	2	2	.....	.....	.....	2	.....	.....	.....	.....	.....
.....	.....	.....	.....	.. ..	2	.....	.....	.....	2	1	.....	.....	.....	1	.....	.....	.....	.....	.....
5	.....	.....	.....	5	.....	.....	.....	.....	.....	6	.....	.....	.....	6	.....	.....	.....	.....	.....
.....	.....	...	.....	.....	1	.....	.....	.....	1	3	.....	.....	.....	3	.....	.....	.....	.....	.....
4	1	1	.....	6	5	2	1	.....	8	17	2	.....	.....	19	.....	.....	.....	.....	.....
1	.....	.....	.....	1	1	.....	.....	.....	1	5	...	.....	.....	5	.....	.....	.....	.....	.....
2	.....	.....	.....	2	.....	.....	.....	.....	... .	1	1	.....	.....	2	.....	.....	.....	.....	.....
2	..	.....	.....	2	1	.....	.....	.....	1	3	.....	.....	.....	3	1	.....	.....	.....	1
10	1	.....	.....	11	1	.....	.....	.....	1	.....	.....	.....	.....	...	4	.....	.....	.....	4
.....	.....	.....	.....	.....	4	.....	.....	.....	4	2	.....	.....	.....	2	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	. .	7	2	.....	.....	9	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	3	.....	.....	.....	.....	.....
3	...	.....	.....	3	4	.....	.....	.....	4	4	.....	...	.....	4	1	.....	.....	...	1
217	31	4	....	252	123	38	3	....	164	222	51	1	....	274	57	10	....	....	67

[*For* RECAPITULATION *see next page.*]

SCHEDULE H.—*Concluded.*

RECAPITULATION.

	Number of Applicants for Licenses.	Number Granted.	Number Refused.
REFORMERS:			
Tavern	962	839	123
Shop	283	245	38
Six Months	10	7	3
Wholesale	11	11	.....
Total	1,266	1,102	164
CONSERVATIVES:			
Tavern	2,408	2,186	222
Shop	527	476	51
Six Months	15	14	1
Wholesale	28	28	.....
Total	2,978	2,704	274
NON-POLITICAL:			
Tavern	274	217	57
Shop	41	31	10
Six Months	4	4	.....
Wholesale	.....	.....	.....
Total	319	252	67

REPORT

OF THE

LIBRARIAN OF THE LEGISLATIVE ASSEMBLY

OF THE

PROVINCE OF ONTARIO.

To the Honourable the Legislative Assembly of the Province of Ontario:

The Report of the Librarian on the state of the Library respectfully represents—

That during the late Parliamentary recess the books in the various sections of the Library have been gone carefully over, and the names of any volumes which have gone amissing have been marked.

From the official papers sent down from the Normal School, as mentioned in previous reports, combined with those previously in the Library, a full set has now been made of the Journals of the House of Assembly of Upper Canada, from the year 1825 (first session of ninth Parliament) till the re-union of the two Provinces in 1840. The Journals of the House of Assembly of united Canada, from the Union till Confederation, are also complete; and there is, in addition, another incomplete set of these, with, besides, a large number of odd volumes from different years, which are of no use to the Library, but which might be exchanged for other books, in the event of any being anxious to complete their sets.

The Journals of the Legislative Council are by no means so complete. They begin with the year 1831, and the volumes for the years 1850, '57, '58 and '59 are wanting.

The Sessional Papers of the Legislative Assembly, previously to Confederation, are nearly complete. For a good many years they were bound up at the end of the Journals. They are found in separate volumes from 1835 and onwards.

The Sessional Papers of the Council for the same period are also by no means complete. They begin with 1843, and from that date the set is in full with a very large number of superfluous copies of some of the volumes. It may be mentioned, once for all, that the number of extra copies in certain years is very large. So much is this the case, that while a full set of the Sessional Papers from 1841 to 1867 comprises 101 volumes, there are in the Library 437 of these papers; and while a full set has been secured out of all these, another could not be gathered out of the remaining 336.

The Journals of the Senate and House of Commons since Confederation are complete, though in some cases only a single copy of certain volumes can be found on the shelves.

The Sessional Papers of the House of Commons are also all in the Library, with, in some cases, a very superfluous number of extra copies. Two full sets are upon the shelves, and out of the remaining 260 volumes another set could not nearly be formed.

The official documents of the several Provinces of the Dominion to be found in the Library are exceedingly imperfect.

The Journals and Statutes of Quebec, since Confederation, are tolerably full. In addition to these, there is a set of the Journals of the House of Assembly of Lower Canada, from 1793 to 1804. But from 1805 to the date of the re-union of the Canadas in 1841, there is not a single public document of Lower Canada.

So far as New Brunswick and Nova Scotia are concerned, the state of matters is still worse; while of Prince Edward Island there are only the Journals of the House of Assembly for the years 1868 and 1871, and the Statutes of 1867 and 1871.

From British Columbia there have come no documents since 1877.

To have these deficiencies supplied would now be a very difficult task, if not altogether impossible; but no more important accession could be made to the Library than a full set of all these documents. In order, if possible, to secure this, the Librarian has written to different persons in the several Provinces, but with very unsatisfactory results. The Hon. Faucher de Saint Maurice, of Quebec, very kindly promised to secure a full set from that Province, but the others have not as yet replied.

The Legislative and Executive documents from the States are also very imperfect. There is on the shelves of the Library a very large collection of Federal documents, but these are by no means continuous. It is scarcely worth while to refer to the volumes received from the several States, as these are both isolated and few, with the exception of New York, from which a very considerable number of volumes has been received. Massachusetts, Connecticut, Pennsylvania, Ohio, Illinois, Louisiana, Iowa and New Hampshire have alone reciprocated in the interchange of official documents, and most of these only for a single year or so. It is very evident that unless such interchange is continuous it is of little or no value.

What has been said of the intermittent and unsatisfactory nature of the exchange of documents in the case of several of our own Provinces, as well as of different States of the Union, cannot be repeated in reference to the Australian Colonies, most of which have, for a good number of years past, sent their Parliamentary and Executive documents very promptly, and generally in full. South Australia and Victoria have been specially attentive in this matter—the former having furnished a complete set of its Sessional Papers since 1869, and the latter since 1875. The Statutes of the different Australian Colonies are not in any satisfactory state of fulness, either in the yearly volumes or in a consolidated shape.

The Librarian has, as directed, despatched full sets of the Ontario Journals and Sessional Papers of last session to the Legislative libraries of all the Provinces of the Dominion, as well as to that of Newfoundland; to the seven Australian Colonies and Cape of Good Hope; to the States of New York, Massachusetts, Connecticut, Ohio, Illinois, and Louisiana, and to the Smithsonian Institute, Washington; as well as to the British Museum, the Royal Colonial Institute, and the Meteorological Office, London, England. The extent to which there has been a reciprocation of exchange is noted at the end of this Report.

During the year a considerable number of pamphlets on Canadian subjects have been arranged and bound in volumes. These will be found both interesting and important. The number of such volumes in the Library is now 74, and it is exceedingly desirable that anything, in addition, bearing on the past history of the Province or Dominion, whether in the shape of tract, pamphlet, or broadside, should be secured, so as to aid, in the most efficient way, the labours of those who may, in coming years, engage in historical or antiquarian researches. The Librarian takes the liberty of adding, in this connection, that as a complete set of the Journals and Sessional Papers of Upper Canada, from 1825 up to the time of the Union in 1841, and from that time forward to the present day, is already in the Library, it would be exceedingly desirable to have the Journals of earlier date, the originals of which, it is understood, are in the Parliamentary Library at Ottawa, copied, so as to make a continued series of the Official Documents of the Province from the commencement.

The purchases made during the past twelve months have not, from the necessity of keeping within the sum voted, been to such an extent as in the previous year, but they have been of the same character, and will be found to add to the value and usefulness of the collection. By last report the number of volumes on the shelves, exclusive of Official

Documents, was given at 13,000. During the year there have been added to the catalogue a considerable number that had not been previously entered. These, with the volumes purchased, make the whole number, as far as can be ascertained at the present time, 13,700. There are still a very considerable number of volumes not returned, but these, it is to be presumed, will be all forthcoming, as in former years, so soon as the House opens.

The additional shelving provided has relieved the pressure for room in certain sections, and has permitted such a rearrangement of the books as will easily secure accommodation for all the accessions to the Library likely to be made for some time to come. The donations to the Library during the year have been as follow :—

From Dominion :
Sessional Papers, Journals and Statutes for 1882, with one copy of Hansard Debates.

From the Province of Quebec :
Journals, Sessional Papers and Statutes for 1882.

From all the other Provinces of the Dominion :
Nothing.

From the State of New York :
Assembly documents, 1880-81, 17 volumes.
Laws and Penal Code, 3 volumes.

From the State of Connecticut :
Legislative documents, 1882, 2 volumes.
Report on Agriculture, 1881.
Special Acts } 1882.
Public Acts }
House Journals, 1882.
Senate Journals, 1882.
State Register and Manual, 1882.

From the State of Illinois :
Reports of General Assembly, 4 volumes.
Senate Journals } 1881.
House Journals }
Railroad Warehouse Commission.
Laws, 1882.

From the State of Ohio :
State Papers for 1881.
The St. Clair Papers, 3 volumes.
Ohio Statistics, 1881.
Ohio School Report for 1881.
Laws of Ohio, 1881.
Report of State Auditor, 1881.

From the State of Massachusetts :
Public Official documents from 1866 to 1880 inclusive, with the exception of the set for 1875, 60 volumes.

From the State of Louisiana :
Reports, 1881.
Statutes, 1881.
Journals of House, 1881.

From the United States:
- Agricultural Report for 1880.
- Reports of United States Senate, first and second sessions of 46th Congress, 7 volumes.
- Senate documents, 1880-81, 4 volumes.
- Executive documents, 1880-81, 7 volumes.
- House Miscellaneous, volumes 1, 2, 3, 5 and 6.
- House Reports, volume 6th, 1880-81.
- Senate Journal, 1880-81.
- Congressional Record, third session of 46th Congress, 1880-81, 3 volumes and an Index.
- Record of special session of Senate, 1881, 47th Congress.

From New South Wales:
- Statutes for 1881.
- Sessional Papers for 1881.
- Debates in Parliament, 1881-82.

From Tasmania:
- Legislative Council Journals, 1880 and 1881.
- Sessional Papers, 1880 and 1881.

From South Australia:
- Proceedings of Parliament for 1881, 3 volumes.

From Queensland:
- Votes and Proceedings for 1881-82, and various Reports.

From Victoria:
- Votes and Proceedings of Assembly, 1880-81, 4 volumes.
- Votes and Proceedings of Legislative Council, 1880-81.
- Acts of Parliament, 1880-81.

From Cape of Good Hope:
- Miscellaneous, 11 volumes.

All which is respectfully submitted.

WILLIAM INGLIS,
Librarian.

FIRST ANNUAL REPORT

OF THE

PROVINCIAL BOARD OF HEALTH

OF ONTARIO

BEING FOR THE YEAR 1882.

Printed by Order of the Legislative Assembly.

Toronto:
PRINTED BY C. BLACKETT ROBINSON, 5 JORDAN STREET.
1883.

PROVINCIAL BOARD OF HEALTH OF ONTARIO.

WILLIAM OLDRIGHT, M.A., M.D., *Chairman.*
CHARLES W. COVERNTON, M.D.
HORACE P. YEOMANS, B.A., M.D.
FRANCIS RAE, M.D.
JOHN J. CASSIDY, M.D.
JOHN GALBRAITH, M.A., C.E.
PETER H. BRYCE, M.A., M.B., *Secretary.*

ERRATA.

Page 6, line 39, *for* "Redmour" *read* "Ridenour."
" 10, " 2, strike out the word "received."
" 10, " 17, *for* "public funerals" *read* "burial permits."
" 10, " 29, *for* "Cutter" *read* "Cutler."
" 10, " 30, *for* "Stattuck" *read* "Shattuck."
" 16, " 26, *for* "convince all" *read* "convince everybody."
" 17, " 3, *for* "control" *read* "the benefits of control."
" 21, " 15, *for* "Wright's" *read* "Wight's."
" 26, " 4 from the bottom, *for* "at least" *read* "or where at least."
" 28, " 28, *for* "in something" *read* "somewhat."
" 29, " 12, *for* "or if different" *read* "or requires them, if different."
" 29, " 15, *for* "recepticles" *read* "receptacles."
" 29, " 3 from the bottom, *for* "passing" *read* "making."
" 30, " 18, *for* "Suspicious, and Facts" *read* "Suspicions and Facts of."
" 30, " 34, *for* "circumstances" *read* "purposes."
" 30, " 35, *for* "with immigrants" *read* "to the immigrants."
" 31, " 18, *for* "hours" *read* "press."
" 32, " 26, *for* "sewage" *read* "sewerage."
" 33, " 3, after "Earthenware" add "Drain Pipes."
" 33, " 22, *for* "New State" *read* "New York State."
" 42, " 9 from the bottom, *for* "Marey" *read* "Marcet."
" 54, " 10 and 11 from the bottom, *for* "I" *read* "we."
" 68, " 2 from the bottom, *for* "in, their" *read* "in their."
" 85, " 34, *for* "As to whether" *read* "That."
" 92, " 18, *for* "the" *read* "two."
" 92, " 8 from the bottom, *for* "force" *read* "free."
" 92, bottom line, *for* "position" *read* "portion."
" 93, line 25, *for* "B.M." *read* "D.M."
" 93, " 27, *for* "visited" *read* "revisited."
" 93, " 35, *for* "sewerage" *read* "sewage."
" 93, " 41, *for* "in" *read* "viz."
" 93, " 43, strike out the words "connected therewith."
" 94, " 7, *for* "whereas" *read* "when."
" 94, " 27, *for* "when" *read* "then."

FIRST ANNUAL REPORT

OF THE

PROVINCIAL BOARD OF HEALTH.

Office of the Provincial Board of Health,
Parliament Buildings,
Toronto, Dec. 1st, 1882.

To His Honour the Honourable John Beverley Robinson,
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:—

The Provincial Board of Health begs leave respectfully to present this, its First Annual Report.

In order that the nature of the work undertaken by the Board and the methods by which it has been carried out may be more clearly seen and more readily understood, it has been thought well to classify the various subjects treated of in this Report under eight heads. The Board has preferred this method, trusting that by it the matters referred to will appear more interesting and more readily attainable than if the various diverse subjects were loosely arranged in chronological order throughout.

The contents of the Report thus naturally divide themselves into three parts:—

PART I.

Contains the Report, proper, of the Board, arranged under the eight following chapters:—

Chapter I.—Organization of the Board.
" II.—Collection of Sanitary Information.
" III.—Dissemination of Sanitary Information.
" IV.—Investigations into the Causes of, and Remedies for, various outbreaks of Disease.
" V.—Action taken in cases of various reported Nuisances and Unsanitary Conditions.
" VI.—Collection of Statistics of Prevalent Diseases.
" VII.—Relations of the Board to various Classes.
" VIII.—Work to be done.

PART II.

Contains the Appendices to the Report proper, arranged alphabetically so as to correspond with the chapters of Part I. The contents of the various Appendices are as follows:—

Appendix A.

Article I.—Copy of Act, Chap. 29, 45 Vict., establishing a Provincial Board of Health.
" II.—Condensation of the Minutes of Proceedings of the meetings of the Board.

Appendix B.

Article I.—Report of the Commission for obtaining Sanitary Information in Great Britain and Europe.
" II.—Report of the Commission appointed to visit Boston, New York and Albany, to obtain information concerning Vaccine Farms and other Sanitary matters.
" III.—Report of the Delegate to the International Sanitary Congress at Geneva.
" IV.—Report of the Committee appointed to attend the Sanitary Convention at Greenville, to visit the Offices of the State Board of Health of Michigan, and the Health Departments of Detroit and Toledo.
" V.—Circular to the Clerks of Municipalities.
" VI.—Circular to Physicians.

Appendix C.

Article I.—Pamphlet entitled "How to Check the Spread of Contagious or Infectious Diseases."
" II.—Circular sent to Clergymen, High School Teachers, and Public School Inspectors with copies of Pamphlet (Article I.).
" III.—Copy of a Sheet of Directions for the Resuscitation of the apparently Drowned, etc.
" IV.—Memorandum forwarded with other Documents of the Board to Clerks, Physicians, etc., concerning the Powers and Duties of Municipal Authorities respecting the Public Health.
" V.—Classification of Diseases.

Appendix D.

Article I.—Report of the Commission of Investigation into the outbreak of Typhoid Fever at Sarnia.
" II.—Report of the Commission of Investigation of the endemics of Malaria at Coboconk and Madoc.
" III.—Report of the Investigation into the outbreak of Typhoid Fever at Stratford.
" IV.—Report of the Committee of Investigation into the outbreak of Typhoid Fever at Lambton Mills.
" V.—Report regarding Sewerage, Disposal of Sewage, and Water-supply of Toronto.

Appendix E.

Article I.—Report of the Commission on Immigrant Inspection Service.

Appendix F.

Article I.—Report of Committee on Disease Reports.
" II.—Form of Circular addressed to Medical men requesting their active co-operation in the work of collecting Disease Reports.
" III.—Circular of Directions to Correspondents.
" IV.—Copy of the *Weekly Health Bulletin*.
" V.—Circular of Explanation of the *Weekly Health Bulletin*.

Appendix G.

Article I.—Catalogue of Books and Exchanges.

Appendix H.

Article I.—Report of Committee on Legislation.

PART III.

Contains the following:—

Article I.—The Chairman's Inaugural Address.
" II.—Report of the Secretary of the St. Thomas Sanitary Convention, embodying Papers by—
Dr. Oldright, on "The Aims and Objects of Sanitary Conventions" (Introductory).
Judge Hughes, on "Adulteration of Food."
Dr. Ellis, on "Contamination of Drinking Water."
Dr. R. W. B. Smith, on "Contagion."
Prof. Austin, on "The Public Schools and the Public Health."
Dr. J. Coventry, on "Prevention and Restriction of Controllable Diseases."
Dr. Cassidy, on "Heating and Ventilation of Buildings."
" III.—Lecture by the Secretary, under the auspices of the Galt Mechanics' Institute, on Zymotic Diseases, their Causes and Prevention.
" IV.—Lecture by the Secretary before the Brant County Teachers' Association, on School Sanitation, its Necessity and Methods.

PART I.

CHAPTER I.

ORGANIZATION OF THE BOARD.

1. *The Necessity for such a Board.*—As remarked by Dr. Henry I. Bowditch, who delivered the centennial discourse on Public Hygiene before the International Medical Congress of 1876, "theoretically Public Hygiene is the most important matter any community can discuss, for upon it, in its perfection, depend all the powers, moral, intellectual and physical, of a State." Recognizing a growing belief on the part of the people in the axiomatic truth of this statement, carefully appreciating the opinions of the general public, and being actuated by an earnest and solicitous concern for the welfare of the people over whom it has been called to rule, the Government last session introduced a Bill, and the public representatives in the Legislature agreed to its clauses, establishing a Provincial Board of Health for Ontario, having close relations with all Local Boards, which might, under the Act (36 Vic. cap. 43), be already in existence, or be organized in the future.

That such a Central Board should be established permanently to discuss measures for concerted action on the part of the Government in such extensive public questions as those of Immigrant Inspection, in common with the Dominion authorities and the National and State Boards of the neighbouring Union, seems reasonable; that the Government should assume it to be its duty to enquire into the preventable causes which, as in the case of undrained lands, and lands drowned by dams on rivers, create widespread epidemics of malaria and other diseases too extensive for local municipal action, seems just; and that in its relations with municipalities it should have thought it wise to make such relations more intimate by giving to a Central Board power to confer with and advise Local Health Boards concerning health matters requiring municipal attention and municipal reform, are facts so patent that it may be doubted if any will be found who challenge the wisdom of such a course.

To some it may, however, have appeared that the municipal machinery in existence would have obviated any great necessity for a Central Advisory Board; or to others that the average health of this Province is so good that but little is left for Preventive Medicine to do. But if it be remembered for a moment what an enormous proportion of deaths out of the 19,802 in a population of 1,890,000 which took place in Ontario in 1880, was due to preventable causes, or what are called zymotic deseases, there can be no persons who would not grant that there is much yet to be done.

With a vigorous and energetic population; with a high degree of general prosperity, and a more than average degree of education and refinement; with a clear atmosphere and moderate climate, and with a medical profession high in the scale of scientific ability, we have yet to confess the undesirable fact that our mortality per thousand for the whole country (with returns as yet not wholly perfect), is at least eighteen; while in some European cities, where we are accustomed to suppose that the results of long years—even generations—of "poverty, hunger, and dirt," have produced almost ineradicably baneful effects, the death-rate is very considerably less, as, for example, in Geneva with a death-rate not exceeding fifteen per thousand.

That there is, then, a necessity for such a Board must be evident to all; and that the efforts of Sanitary Boards have produced most appreciable results is seen in the fact, as stated by Edwin Chadwick, Esq., K.C.B., London, England, that in the decade between

1872–82 there has been a decrease of four and a half per cent. in the death-rate of England and Wales, from that of the preceding thirty years, or in other words, 250,000 persons were living in 1882 who would have been dead, had the death-rate of the previous period continued.

2. *Composition of the Board.*—Shortly after the passing of the Act above referred to (Public Health Act of 1882), the following gentlemen were appointed to and accepted positions on the Board.

William Oldright, M.A., M.D. (Professor of Sanitary Science, Toronto School of Medicine), *Chairman.*

Charles William Covernton, M.D. (Professor of Sanitary Science, Trinity Medical School).

John J. Cassidy, M.D. (Surgeon to General Hospital, Toronto).

John Hall, M.D., Toronto.

Francis Rae, M.D., Mayor of Oshawa.

Horace P. Yeomans, B.A., M.D., Mount Forest.

By a subsequent Order in Council, the Secretary of the Board, Peter H. Bryce, M.A., M.B., L.R.C.P. & S., Edin., was appointed and entered upon his duties on the first day of May.

The Board thus constituted held its first regular meeting on the ninth day of May for the purpose of organizing, and for the conduct of business. It may here be mentioned, however, that active work had been already begun by the appointment of a commission consisting of the chairman, Dr. W. Oldright, and Dr. J. J. Cassidy, who made a visit of inspection into the methods of working of the State Board of Health at Lansing, Michigan, and of the City Boards of Health of Detroit and Toledo. In addition to this, a commission, consisting of Drs. C. W. Covernton and H. P. Yeomans, visited Sarnia, making there an investigation into the causes of a serious outbreak of Enteric (Typhoid) Fever.

So much work arose from action inaugurated at the first meeting that a special meeting of the Board was shortly afterwards held on the sixth of June. In addition to this another special meeting was called for the twenty-seventh of June, at which previous work was completed and new work undertaken.

Subsequent regular meetings were held under Clause 5 of the Act, on the 5th of September and the 30th of November.

A *résumé* of the work undertaken and completed at these meetings will be found in the condensation of the minutes of the various meetings, in Appendix A (Article II.) of this Report.

Dr. John Hall having resigned his position, owing to the urgency of other duties, the appointment of John Galbraith, M.A., Professor of Engineering in the School of Practical Science, was made—he entering upon his duties in November.

3. *Elements in the composition of the Board.*—Naturally in the composition of any Board of Health the public expects to find the great proportion of its members medical men. But that other elements have and do enter into the composition of such Boards is well known; while it may not be so well known that it is to a layman, Mr. Lemuel Shattuck, of Boston, that Massachusetts, the first American State to establish a Board of Health, owes the first report of a Sanitary Commission; and that it is to a London barrister, Edwin Chadwick, Esq., K.C.B., that England owes the most strenuous and life-long efforts in the cause of Preventive Medicine.

Hence it seems a wise provision that there may be at least three of the members of the Provincial Board of Health, as at present constituted, laymen or from professions other than the medical.

On many city Boards, and on some State Boards in the United States, are to be found lawyers, the peculiar functions of whom it would seem to be, to advise the Board as to the legal bearing of actions undertaken by it. The presence of such a gentleman on the Provincial Board of Health would seem very desirable, since he would be specially competent to advise in questions which frequently present themselves regarding the various Health Acts already existing, or to recommend such new legislation as executive emergencies, which may arise, would seem to warrant.

But another desideratum in the constitution of a Health Board is the presence upon it of some gentleman having the *status* of a professional engineer, whose skill may be called into requisition in giving advice in the many details, which arise in connection with questions of sewerage and drainage systems, water supplies, etc. Such a gentleman the Government has secured in Prof. Galbraith, of the School of Practical Science.

Of the medical portion of the Board, the chairman and one other member, are lecturers on Sanitary Science, in two medical colleges, while the other members are well known practitioners. The Secretary, likewise, is a medical man.

CHAPTER II.

COLLECTION OF SANITARY INFORMATION.

1. *Sources of Information.*—As would be naturally assumed, various members brought to bear on the work much special knowledge concerning those subjects likely to engage the attention of the Board. But, although this was true, yet there was a great necessity for literary works, bearing more particularly on sanitary matters, being obtained for perusal by its members. This has been obtained in a large degree by means of exchanges from foreign Boards of Health—especially those of various States of the Union,—and by medical journals from different sources. A small amount of literature, consisting of some sanitary magazines and works on analyses of foods, air and water, has been purchased.

Another very valuable source of information has been the attendance of members of the Board at various Sanitary Conferences. The first visit of this kind made, was by two members, Drs. Oldright and Cassidy, to a Convention held at Greenville, Mich., in April, under the auspices of the Michigan State Board of Health. Papers were there read on a number of important sanitary subjects; discussion on these took place, and was engaged in by the delegates from this Board. Through this means they returned with many new and useful ideas on sanitary subjects, some of which have been acted upon in the work of the past year.

Another such visit was that paid by Dr. C. W. Covernton to the International Congress of Hygiene, held in September last, at Geneva, Switzerland. The Board thought it wise to take the opportunity of this gentleman's presence on the continent at this time to request him to attend the Congress as a representative of the Provincial Board. It has been owing to his presence there as a Canadian delegate, and also to the fact of his having employed much valuable time in collecting information both on the continent and in Britain, that the progressive spirit, shown by the Canadian Province of Ontario, has been spoken of in such commendatory terms by the leading medical journal, *The Lancet*, of London, England. The report of Dr. Covernton, as also that of the delegates to Michigan, printed in Appendix B, will be found to contain much valuable information.

Another means which has been freely made use of by this Board, has been the visiting of Sanitary Boards in various places both in Britain and the United States. The first information obtained in this way was that obtained by the delegates, previously referred to, who visited the Michigan Health Convention. At this time visits were made to the State Board, at Lansing, Mich., where they were received with great cordiality by the Secretary and other officers; and obtained from them very extended and complete information along with copies of all *forms* used by that Board in the execution of its extensive work. Information, too, was obtained from the officials of the Detroit Board of Health, and also from those of the Toledo Board.

Such information and the documents obtained by these delegates have proved extremely valuable to the Secretary in the numerous duties which have fallen to his lot in the labour of organization of the office work of the Board. The large amount of knowledge, obtained during this visit has been supplemented with that obtained by the Chairman and Secretary in an inspection they were commissioned to make into the methods of working of the State Boards of New York and Massachusetts, and also those of some of the larger American City Boards, such as those of Boston and New York, where organizations are at work performing labours requiring the annual expenditure of large sums of money, amounting in the case of New York to some $700,000. The work implied by such a vast organization seems almost incredible; but when it is recollected that the sanitary well-being of over one million souls has to be cared for, we

cease to be surprised. As will be seen, under Appendix B, much special knowledge, pertaining to city Boards was then obtained.

Detailed information concerning the conduct of vaccine farms was also obtained, notably concerning that carried on at Chelsea, near Boston, by Dr. Cutler, who with much courtesy showed the delegates the complete arrangements of the establishment and the *modus operandi* employed in the preparation of *bovine* virus. Detailed information of the process will be found under Appendix B, along with the report of the Commission of Inspection into the working of the State Boards of Massachusetts and New York, as well as of the city Boards of Boston, New York and Albany.

2. *Difficulties to be overcome in the collection of Sanitary Information.*—The sources from which information concerning the working of Boards similar to the Provincial Board of Health could be obtained were wholly outside of the Dominion, and hence, as might be expected, modifications in their methods of working to adapt them to our municipal institutions have in some cases appeared necessary.

The sanitary information, which this Board has been able to obtain in Canada, has been chiefly the documents of the recently formed city Board of Montreal. In response to a circular issued to the clerks of the various municipalities of Ontario, the Board has found that Local Boards of Health have been formed in comparatively few cases; and consequently sanitary information, concerning the various localities, has been very meagre. The Board takes pleasure, however, in stating that under the influence of the circulars and by the hearty aid being lent to the efforts of the Board by the profession everywhere, many Local Boards have been or are being formed, from which it is expected much useful information will gradually be obtained.

3. *Successful results of the Board's efforts to obtain Information.*—That the Board has, however, been successful, in spite of difficulties, in obtaining a large amount of information, will be seen on examining the large number of exchanges, referred to in the library catalogue (Appendix G), by the appended reports of materials obtained from Boards in various States of the Union, and from those in England, Ireland, etc., and by the reports of a large number of investigations of outbreaks of disease which have occurred in various parts of the Province.

These various materials will not only form the nucleus of a sanitary library, but will supply useful materials for reference in the future. Another source of information from which the Board looks for great results has very recently been inaugurated. This is the system of Weekly Disease Reports. As, however, a detailed explanation of that adopted in the Reports will be given in another chapter, its consideration will, in the meantime, be deferred.

CHAPTER III.

DISSEMINATION OF SANITARY INFORMATION.

1. *The Necessity for its Dissemination.*—As remarked by a recent writer, "the public, ignorant of sanitary laws, have hitherto paid little or no attention to Public Hygiene, except when, under influence of some frightful epidemic, the panic-stricken nations have been aroused from their usual apathy, and have then vainly tried to resist the pest by drugs, by appeals to the gods whose laws they have never studied; or finally, perhaps, by legal enactments after the days of suffering are past." Though, perhaps, it would be too much to say that this remark is applicable to the people of Ontario to-day as a whole; yet there is no doubt that but little thought is given to sanitary matters until some fatal epidemic is present or is threatened, when all wildly seek for relief in some external authority or aid, never dreaming that sanitation like charity begins at home.

The necessity for a more general knowledge of sanitary laws in the many varying conditions which make up ordinary social life, is so apparent to everyone as not to need proof. How few houses in the land have arrangements made in them for good ventilation and rational systems of warming; how few households take precaution against the infection of wells, and the air of their houses, by cesspools and open privies; and how few villages, towns and cities have adopted any systematic cleansing of streets or house-premises, or have adopted precautions against the spread of infectious diseases by the isolation of the sick, or by preventing children from infected families spreading the contagion in the public schools.

This condition of affairs must be due, either to a lack of appreciation of the detriment to the general health which the neglect of sanitary laws entails, or from an insufficient knowledge of the means to be taken in remedying such evils. Feeling the urgency for the adoption of more extended sanitary measures by the public at large, the Board of Health, at its first meeting, decided to immediately put itself in communication with the various municipalities concerning their sanitary condition.

2. *Ends to be obtained by the Dissemination of such Information.*—These are various, inasmuch as, adopting Dr. Bowditch's words, "Public Medicine—as it is called by Dr. Cameron, of Dublin—aims at preventing all forms of disease which may be prejudicial to the moral, intellectual, and physical well-being of the people." It aims at promoting their moral well-being by teaching the injurious effects of such social habits as the intemperate use of alcoholic liquors, opiates and other pernicious drugs; it not only aids in the intellectual advancement of the race, by opening up new fields for study in its connections with the various branches of moral, mental and physical science, but it also tends to the conservation of intellectual vigour by pointing out, amid other dangers, those which are incident to the busy epoch in which we live; whilst, finally, it endeavours to promote the physical health of the people by instructing them in the nature of the physical laws which govern their own bodies, as regards air, food, exercise, dress, and the numerous other details which belong to the every-day life of the individual.

3. *Methods of Propagation Adopted.*—As will readily be seen the task which Sanitary Science sets itself is a most extensive one. But men have been thousands of years examining the problem, and something has been done. Should anyone think that but little progress has been made, we need only point to the fact, that within a hundred years infant mortality has been reduced by better ventilation, better clothing, better food and greater cleanliness from seventy-five per cent. of all births to a little over twenty-five per cent., in order to prove that though

> "Science moves but slowly, slowly, creeping on from point to point,"

still it does advance. The first step, with such ends in view, adopted by the Board, was

one for the improvement of local municipal organization in matters relating to the public health. A circular was addressed to the clerk of every municipality in the Province, inquiring whether it had taken advantage of the powers given under the Health Act (Cap. 190, R. S. O.) for the establishment of a Local Board of Health, and for the passing and enforcing of by-laws, tending to the improvement of the public health; and urging that it take such action in case it had not already done so. In addition to this a circular letter was sent to the two thousand physicians of the Province, asking them to use their influence in the same direction in their respective localities. Not only this, but the municipalities were from time to time invited to inform the Board of their various local sanitary conditions, after the obtaining of which the Board would be happy to aid them in taking any action, deemed necessary in the public interest, and to supply them with such sanitary literature as might from time to time be published by the Board.

The next step was to publish a pamphlet entitled "How to check the spread of Contagious Diseases," copies of which—along with a copy of the Health Act of 1882, and a memorandum of instructions concerning the powers and duties of Local Boards—were sent to every municipality and to every physician. The distribution of the pamphlet was still further extended: a copy was sent to every clergyman in the Province and to every High School teacher; and a sufficient number to every Public School inspector to supply all or most of the teachers coming under his jurisdiction.

Various items of information relating to the public health have also from time to time been communicated to the public through the leading journals.

The next step of importance was the holding of a Sanitary Convention at St. Thomas. At this convention, held with the intention of bringing the Board into direct relations with the general public, papers on sanitary subjects were read by medical gentlemen and gentlemen of other occupations, at each session; after which discussion was carried on, on the subject of the paper, by any persons of the general audience who might desire to do so.

A number of important subjects were discussed, some of the most important being the "Adulteration of Foods," the "Contamination of Water," the "Ventilation of Dwellings," the "Isolation of Infected Persons during Outbreaks of Contagious Diseases;" and a paper on "Sewerage of Towns." The reading of these papers elicited much information in the general, interesting, and animated discussions which followed. The good which must accrue from such conventions, where scientific subjects are treated of in a popular manner, in both interesting and educating the public in matters of public hygiene, cannot be over-estimated; and it has become a conviction on the part of the Board, that no greater means for developing the work of the Board can be adopted. Hence it is the intention of the Board to hold similar conventions from time to time in such different parts of the Province as time and circumstances may decide as being advisable.

Another document which the exigencies of the season made it imperative to issue was a printed *sheet* with directions to be followed in cases of drowning accidents. A large number of these has been circulated throughout the Province, and placed in the hands of school teachers and others. That a general knowledge of the scientific methods adopted under such circumstances will be instrumental in saving many valuable lives is beyond all dispute.

Another method, which need not be more than mentioned here, as it will be referred to in a later part of this report, is the dissemination of information concerning the prevalence of different diseases in various districts throughout the Province, and of the causes which may seem to be most nearly associated therewith, by means of Weekly Health Bulletins. While the labour in preparing them is very great indeed, it is felt that the benefits to be received by the public at large from such a knowledge cannot be over-estimated.

Another means has been sanitary lectures. This has been carried out principally by the Secretary of the Board, who has, on invitation, delivered lectures in various places under the auspices of Mechanics' Institutes, County Teachers' Associations, etc. That the public are much interested in sanitary matters, the success of these several meetings amply proves; and that this interest is steadily increasing is witnessed in the fact

that a very considerable number of engagements, which, owing to the press of other official duties, have been deferred, are yet to be fulfilled with Institutes in various sections of the country.

4. *The Results of the Dissemination of Sanitary Information.*—As is well known, it is in matters which the general public feel have a direct bearing on their pecuniary well-being, that a hearty interest can be most readily evoked; while objects which have in anyway attached to them a scientific complexion, the general public are too often inclined to think are not for anyone beyond the professional pale. Hence, in matters of import to the public health, there seems to have been in some quarters a half-expressed idea that the people are expected to do something which they may not wish to do, or else that these questions, though they may have some general public application, have no special bearing upon them as individuals. Such feelings, where in any case they may exist, it is the earnest desire of this Board to dissipate. It has endeavoured to make the people understand that the Provincial Board of Health is, *par excellence*, the people's defence against, if we may so express it, external foes in the shape of diseases imported by immigrants or others from foreign lands, and against internal evils as outbreaks of Scarlatina and Diphtheria, which too frequently lift up their fatal forms in our various communities. That the means, adopted towards such desirable ends by the propagation of information in the ways we have alluded to has been wholly successful, the Board is not vain enough to suppose; but that much ground has been gained, the many communications received for further supplies of pamphlets and the requests for sanitary lectures to be delivered under the auspices of the Board cannot leave any room for doubt. Many Local Boards of Health have been formed during the year; and when these shall have "learnt their limbs," there are the best reasons for hoping that local sanitation will be more extensivly carried out.

CHAPTER IV.

INVESTIGATIONS INTO THE CAUSES OF, AND REMEDIES FOR, VARIOUS OUTBREAKS OF DISEASE IN THE PROVINCE.

1. *The Necessity for such Investigations.*—That investigations into the causation of disease have in the past done something towards ameliorating the condition of the human race will, we think, be readily conceded, when we remember that, while in 1700 A.D. the death rate in London was forty in the thousand, and in 1801 it was computed as twenty-six in the thousand, it had in 1875 decreased to twenty-three in the thousand. From this illustration we at once conclude that some causes have been at work tending to lessen human ills, and human mortality. These briefly stated have been the systematic and scientific methods of observing facts in relation to disease, and thence educing inferences as to causes. Up to the beginning of the present century, however, these methods were hardly known—certainly not appreciated. The mistake of the illustrious men of the last century was that they were working too frequently upon false premises. Thus Boerhaave, of Leyden, thought all disease was in the fluids of the system, while Cullen, of Edinburgh, thought it was wholly in the solids. Benjamin Rush, the father of American Medicine, thought that "convulsion of the arteries is the proximate cause of all fevers," and dogmatically declared that the time would come, "when the general use of calomel, jalap and the lancet shall be considered among the most essential articles of the knowledge and the rights of man."

Thus it came about that both physicians and laymen became convinced that the physician, by the proper or improper use of drugs, and drugs alone, held in his hands the health of his patient; and in consequence of this the physician was too often looked upon as in some mysterious manner the arbiter between life and death, from whose dictum there could be no appeal.

But as Christison and Bennett succeeded Cullen, as Louis and Andral replaced Broussais in France, and a whole host of experimenters in England, Germany, and America have replaced the irrational methods of the early part of the century, so there has come with them the establishment of what Louis calls the "Modern School of Medical Observation," in which the enlightened physician looks for the presence of any deleterious agencies or unremoved causes of disease.

Here in a sentence we have given the principles which have come to be the basis of medical science, and which have been but the stepping-stone to what stands out as prominently characteristic of the medical science of the last twenty years, viz., the *investigation* of what these deleterious agencies are. As improved chemical processes and microscopic methods have become so preeminently valuable in such investigations, so with these have developed in equal degree the inductive processes of reasoning from effect to cause, until the whole scientific world is crowded with an army of workers eagerly endeavouring to solve,—and solving,—the comprehensive problems of *biology*. And in connection with these facts we look for the most powerful agencies in the solution of many perplexing problems lying upon the threshold of Preventive Medicine. Given a thorough knowledge of the causes of each of the manifold ills affecting mankind, and a general appreciation of them on the part of the public, then would we have the Archimedean power by which the people would be raised to an infinitely high level of sanitary improvement. But it is in the attaining to this ideal that the difficulty lies. Not only do the people not know, not only do they not appreciate, the minute, yet all potent causes which originate disease, but they cannot bring themselves to comprehend the truth expressed by Dr. Budd when he says, concerning the germs of Typhoid Fever, "It is humiliating to think that issues such as these should be contingent on the powers of an agent so low in the scale of being that the mildew which springs up on decaying wood

must be considered high in comparison." Under such a condition of affairs it must ever be the duty of the true apostle of Preventive Medicine to bring all his energies to bear, not only in propagating among the people at large as much accurate knowledge as may be possible of the known causes which either originate or serve to propagate many diseases, but he must and ought to labour to discover the *causus morborum* of the many ills regarding whose initial steps and the conditions under which they tend to advance, so little is known, understood or appreciated.

Such then is the present condition of medical knowledge on the question of the causation of disease, and such are some of the many reasons which point to the pressing necessity for the Board to extend its investigations in such directions as will be most fruitful in practical results.

2. *The various Investigations undertaken.*—Taken in chronological order they may be referred to separately; or classified, they may be divided into two. As, however, the reports of the various investigations are given separately under Appendix D, it will here prove more convenient, both for the sake of unity and brevity, to classify them.

3. *Investigations into the Causation of Malaria.*—During the past year two applications, the one from Coboconk, in Victoria, and the other from Madoc, in Hastings, were made to the Board, requesting it to send a committee of its members, or some competent person, to examine into the wide-spread prevalence of Intermittent fever in these districts.

A Commission, consisting of Dr. Cassidy and the Secretary, was deputed to make the enquiry. Roughly stated, there were two questions to be solved. The one was whether large accumulations of sawdust, spread over the ground, and along the edge of a river, were the immediate cause, or even the predisposing cause, of an ague which left unaffected scarcely an individual in the village of Coboconk, which is situated for the most part on an island in the Gull River. The other question was whether, in the case of a wide-spread epidemic of a very severe congestive type, in Madoc and vicinity, the immediate, or even the predisposing, cause was to be found in the presence of a wide-spread area of drowned-land extending to the border of the village corporation. It is perfectly clear that here the Committee had no opportunity to avoid grappling with two distinct problems in the causation of malaria. Now it may be said that all this Committee could do was to make use of the ordinary theories as to the causation of malaria, look at the facts, and return home and report with a "yes" or a "no."

For various reasons, however, this would have been unwise and unjust, since in both cases there were material interests involved. Thus it will be seen the scientific principles already enunciated had to be at once brought into use. It would first be necessary to collect as many facts in both cases as possible, and then try to decide how many of these facts might fairly be counted upon as factors in the causation. As a full report of both investigations will be found under Appendix D, we need only cull therefrom such facts as shall tend to elucidate the point at present under notice.

Take the first case, in which the following facts presented themselves to the Commission:—

1. A village situated high and dry on a rocky island between two currents of an originally swift-flowing river.

2. High and dry rocky banks on either side.

3. A dam at the upper end of the island in the left, and another dam at the lower end of the island in the right, channel.

4. A saw-mill on the right bank, with much sawdust distributed along the bank and in the water along the shore for a considerable distance, this mill having been in its present position some four or five years.

5. A complete immunity from ague and fever up to a period one or two years after this mill was built and sawdust had largely accumulated.

6. This immunity is still almost complete in the farm-houses, a few hundred yards back from the river bank.

7. By the height of the lower dam the water of the right stream has been made very sluggish.

Here, it will readily be seen, seems an extremely simple case of cause and effect. Apparently decomposing sawdust, if not *the* cause, has been at least the *exciting* cause of

the outbreak. But, while the Commission would probably have not been far astray had they stopped at this juncture, and given their ready assent to the opinion so popularly believed and expressed by the inhabitants, scientific principles prevented their doing so. Another fact had to be taken into account. There was, at a point on the right bank, some hundred yards above the saw-mill, a small marsh of several acres in extent, holding at that time but a small amount of water, and largely overgrown with willows, marsh grass and weeds. Now such, when on a large scale, are often notorious as ague-breeding places. Here was a difficulty. But the Committee was in some degree relieved, when it was known that this small marsh had existed for some twenty years previous to the building of the saw-mill, and that little or no malaria had been present in the village. The fact seemed then to be beyond reasonable doubt, that the presence of a large amount of decomposing sawdust was intimately connected with the causation and continued prevalence of the malaria. But, though this was true, it was difficult, if not impossible, to say that, ague once having become endemic in the village, the small marsh was not a factor in its continued propagation.

The Commission deemed it desirable, in connection with this investigation, to have some experiments conducted by a microscopist on the resultants from decomposing sawdust, to ascertain whether or not microscopic ferments in the sawdust were causative of malaria. The results of such experiments were practically negative. As, however, there arise from the decomposing sawdust gases, malodorous and disagreeable, and as its collection under the circumstances is in contravention of the Fishery laws, the Commission advised that action be taken against the mill company for the presence of the sawdust as causing a nuisance, and recommended that it be burnt as fuel or in a kiln.

In the case of the Madoc epidemic, another and larger problem presented itself. The village situated on a basis of Laurentian rock, has a creek passing through it, which has been dammed back, and forms a mill-pond. Like most Canadian villages similarly situated, no system of public drainage has been adopted in Madoc; and, as usual, privies, wells and manure-heaps are too frequently in dangerous proximity, which condition is made all the worse by the fact that the rock, near the surface, makes lateral soakage unusually great, and contamination of wells especially liable to take place. Superadded, or as indeed a distinct question, is the fact that lying south of the village is a large area of swampy lands, extending several miles along the Moira River, which is really drowned land, caused by a damming back of the Moira River at a point some two or three miles below. It is claimed as will be seen in the report, in Appendix D, that this damming back of the river with the consequent drowned land is the exciting cause of the outbreak of fever, which, according to statements taken by the commission, seems to have been of a peculiarly severe type.

As will be seen in this report, there were many facts which had to be considered in their bearing upon the question. But here again, while desirous that if possible some absolute and definite statement be given as to the precise cause of the epidemic, the Commission felt that a positive conclusion could only be arrived at by removing the conditions in the village, which would aggravate any epidemic of disease; and then—should malaria still prevail—would the extensive drowned lands be the self-condemned cause of the potent evil which exists.

With reference to the causation of malaria which is so prevalent in some sections of the Province, much yet requires to be examined into, and in the meantime it seems desirable that some extended action should be taken for the removal of the many causes which are beyond doubt known to favour its prevalence.

The second class of investigations is that concerning the causes of several outbreaks of Typhoid Fever, which have occurred in various parts of the Province. That investigations into the causes of Typhoid have a great practical bearing will readily be conceded, when it is known that the alleged causes are in so many cases capable of removal.

These investigations have been three in number, viz., those of Sarnia, Stratford, and Lambton Mills.

As the reports of each committee of investigation will be found in Appendix D, it will be unnecessary to discuss them in detail; but the points involved may be practically reduced to three in number:

1. Infection conveyed by water-pipes, from the bay water at Sarnia having been contaminated with sewage.

2. Infection conveyed by untrapped house-drains, connecting with sewers containing much decomposing excrement, *vide* Stratford and Sarnia reports.

3. Contagion due to contaminated well-water, as at Stratford and probably Lambton, to the washings from linen of Typhoid patients, and to the excreta therefrom having been thrown into exposed privies without being sufficiently disinfected, the germs therefrom being probably inhaled.

1. Referring to the first point mentioned, the Sarnia Investigation Commission found that Typhoid Fever had been endemic very largely every since the water-pipes for the supply of the town of Sarnia were laid. The main, which is laid out into the bay some 280 feet, is not more than 150 feet away from the point at which the main trunk sewer *debouches* into the bay.

If sewage so deposited, and which, having been slowly moved along through imperfect sewers, has through putrefaction developed its full virulence by the time it has reached the water, is admitted in any case to be causative or provocative of Typhoid Fever, it would appear that every condition is here presented for its full development.

Many interesting points illustrative of the causative influence of contaminated water in the production of Typhoid were brought out in this investigation. Selecting only one, it may be said that one gentleman stated that, living some little distance from that part of the town where the water-pipes were, he paid specially for the laying of a main to his residence. Typhoid, previously unknown in his family, had practically been present in his house ever since the city water had been introduced.

In such a case as this of Sarnia there were in the solution of the difficulty but two courses to pursue, (*a*) either to prevent the contamination of the water of the bay at the point whence the supply is derived, by the removal of the sewer discharge to some distant point; (*b*) or, allowing the discharge of sewage to take place as before, to remove the water-supply pipe to some point where the supply is pure. The discussion of the various schemes proposed will be found in the report.

2. The next point, that of contamination of the air of houses by sewer gas being drawn up into them through untrapped drains connected with imperfectly built sewers, is only second in importance to the one already mentioned. That in most towns and many cities the so-called sewers are frequently simply underground cesspools is notorious,—no system either in their construction or in the supply of water having been adopted, by which the sewage will be removed before, through putrefaction, it has developed its poisonous qualities, provocative of disease. It will be most instructive and edifying for those interested to read the evidence taken in both the Sarnia and Stratford investigations on this point. Nothing apparently can be more manifest than that an almost total lack of knowledge exists on the part of the great proportion of our people concerning the dangers surrounding them on every side from such sources. This very ignorance prevents them from adopting means—the services of some competent Sanitary engineer—by which thorough and comprehensive systems of water-supply and sewerage may be established, reducing the death-rate from this cause to a minimum, as may be seen in many cases, such as that of Frankfort where the annual deaths from Typhoid were :

8.5 in 10,000, before good sewerage, in 1856,
2.0 " " after " " " 1878.

Are the lives of the six or seven individuals in 10,000 annually lost to each of our towns by ignorance or non-observance of Sanitary laws of no value either in a humanitarian, social or commercial sense, amongst a people who estimate human life in many ways so highly ?

These investigations have made prominent, (*a*) the dangers arising from contaminated well-water, and (*b*) the probably dangerous effects from careless disposal of the washings of infected linen, and of the excreta in cesspools.

Sewage contamination of well-water on the premises of many dwellings in towns and cities, where privy-pits dug into the soil are placed often not more than 10 or 25 feet

from wells, has become a method so well known to the professional and general public as conveying Typhoid Fever, that it seems marvellous that causes so well known can be longer allowed to exist. If we take the report of the analyst in the case of the Stratford outbreak the dangerous quality of the water is made most apparent.

As is well known most waters contain (in addition to various salts dissolved from the soil) minute amounts of dissolved organic (animal or vegetable matter) materials. Upon such materials myriads of animalcules feed, and minute vegetable forms, *fungi, bacteria, microbes, etc.*, by deriving nourishment from them, aid in their decomposition, especially in the presence of oxygen. Now, it must be apparent that, other things being equal, these minute organisms, *bacteria, microbes, etc.*—many of which, according to the teachings of modern biology, are, when taken into the blood of man or animals, the origin of contagious diseases—will be present in water, etc., in proportion to the amount of organic materials present as food for them. Hence as it is in sewage that the germs of Typhoid especially develop, the reason for water contaminated with sewage being especially dangerous to health cannot but be plain to everyone.

The same reasoning applies to the dangers arising from the washings of clothing containing germs of disease being allowed to evaporate, when these germs may be carried into the air, or they may be carried into the soil and thence into wells with surface water, becoming in either case capable of being received into the system and so carrying on their deadly work.

Facts bearing out these remarks on the causation of Typhoid Fever find ample illustration in the reports already referred to, and show what an absolute necessity there is for extended public action being taken towards the removal of the means by which the spread of such diseases is made possible.

What is aimed at in these investigations.—What has already been stated almost answers the question. Detect, if possible in all cases, the general predisposing cause and the specific causes of these wide-spread epidemics, and then have the people taught them. Sanitation aims directly at prevention, and never can its end be gained until the whole of the body politic have so impressed upon them *what makes disease*, that all their energies shall be aroused to overturn everything tending to cause or extend it. It is the possibility of mistake in the question of causation which leaves room for the numerous opinions which persons with self-interest are ever too eager to promulgate in order to prevent any general public action being energetically taken to remove a public evil.

Besides the direct object aimed at in these investigations, there is another most important end to be gained, and it is, that by publishing the results of these investigations in reports and newspapers throughout the Province, the general public will gradually become so educated that they will be only too ready to adopt such means for removing causes as shall have been proved most beneficial and practicable.

With the available means of determining the goodness of any water supply no municipality can be excused for the neglect of a plain duty, should it refuse the small expenditure which may be necessary for that object in the case of public water supplies. But there are other cases, and they are the most common ones, where the source of supply is from wells. Contamination of house wells is never necessary. If people want to retain the system of privy-pits, they should, at least, place them at a safe distance from the wells, and have them well lined with water-lime so that their contents may not pass into the wells; but it would be very much better, cleaner and safer if some form of dry-earth system were adopted.

Drains and sewers we can hardly hope will be ever properly constructed until regularly organized Boards of Health have competent engineers and inspectors and strict *plumbing laws*. At present the whole business seems to have a premium laid upon ignorance; while the amount of unpardonable injury to health from such is incalculable.

CHAPTER V.

ACTION TAKEN IN CASES OF OUTBREAKS OF EPIDEMICS, AND OF REPORTED NUISANCES.

Nature of these Epidemics and Nuisances.—It has been already seen that in the case of a number of reported outbreaks of zymotic diseases, investigations have been called for and the Board has undertaken them. But there has been a very considerable number of other cases where it has not been deemed necessary or advisable on the part of the Board to make investigations; but where it has rather been a question of advising action to be taken by the local health authorities, where difficulties have occurred to these in their executive capacity. Other cases again have been nuisances of minor extent, which have been reported to the Board in cases where the local authorities have been either derelict in their duties, or have not deemed the complaint of sufficient moment for action to be taken. We would briefly instance some of these, as out of them arise questions which have a bearing on certain remedial legislation, which the Board would recommend.

Among epidemics of this class not investigated the most serious was one of Smallpox, which occurred at Windsor in the beginning of May. Action on the part of the Board was solicited by the local health authorities, when the Board immediately advised with Dr. Coventry, the Medical Health Officer of the town, concerning measures for the isolation of infected individuals, and for the removal in some cases of patients to the Smallpox Hospital temporarily erected. A conflict between the Health Board and some of the friends of infected persons, concerning their removal to the hospital, which at one time had seemed imminent, was, through the good offices of this Board, prevented; and implicit obedience to the Local Health Board, resulting in the speedy stamping out of the disease, was finally obtained.

A similar case was reported from Ayr, where a villager who had returned from Winnipeg, and had been exposed to smallpox from immigrants, was attacked with the disease. Prompt measures for isolation were also taken in this case, and the disease was speedily exterminated. Too much cannot be said in connection with these cases of Smallpox outbreaks concerning the prophylactic value of vaccination. Where vaccination has been successfully practised, its influence both in limiting the number of cases and the severity of those which may exist, is so great as to place beyond all cavil the propriety of an extension of the existing Vaccination Act, so as to make it embrace the whole Province.

The following statement taken from an analysis of some five thousand cases occurring in the London Smallpox Hospital is confirmatory of this opinion:—

Thus it is stated: "Let an unvaccinated person contract smallpox and the chances are more than one in three that he dies; let a badly vaccinated person (a person with an imperfect scar), contract smallpox and the chances are not quite one in eight that he dies; let a person with two good vaccine cicatrices have smallpox and his chances of dying are less than one in forty; but persons who have been vaccinated in the best and most complete way will, if they ever get smallpox afterwards, not die of it much more than at the rate of one in two hundred."

The resistance to such an Act—fortunately but little heard of in this highly advanced Province—due to the assertions that such a proceeding is unnatural, that there is a danger of communicating along with it various other diseases, such as scrofula and syphilis, and that an element dangerous to life is being introduced into the system, would seem, in the present position of medical science, hardly to require reference. Though it be true that the introduction of vaccine virus into the system of a delicate or enfeebled child has, in isolated cases, brought about fatal results, we must remember that even

chloroform, with all its beneficent influences, has had its victims; though it is demanded of us "why introduce an element of danger into the system, since on your own admission vaccination does not wholly insure against the attack of Smallpox?" it is sufficient to answer, "look at statistics and see whether the infinitely small risk from vaccination is not compensated for by its protective influence;" and, finally, the operation of the vaccine disease, in this protective influence, is so well understood and worked out by M. Pasteur in his experiments upon the *attenuation*, by cultivation, of the *microbes* of *chicken cholera*, and of *charbon* or malignant pustule in sheep, that with the added fact that the *vaccine lymph* can now be obtained as *bovine virus*, directly from the establishments where it is taken with every precaution from the healthy cow, opposition to universal vaccination can now proceed only from individuals who, like the opponents of steam engines and railways in former times, oppose because opposition is their *profession*.

Another event which has occasioned action to be taken on the part of the Board, also arose out of the Smallpox outbreak in Windsor. From a telegram received by the Secretary of the Board on the 22nd of May from the Mayor of Chatham, it appeared that a steamboat excursion was advertised to leave Windsor for Chatham on the 24th of May, and that, as there had so recently been Smallpox in Windsor, a very natural dread took hold of the minds of many persons in Chatham lest it might by this means be conveyed to that town. The incident, although amicably arranged under advice from the Board, is one which is worthy of a brief notice, since it serves to illustrate a deficiency in our existing public health legislation, namely, that there does not exist any authority for preventing the introduction, into a thickly-settled community, of dangerous infectious diseases without the districts in question being first proclaimed by the Lieutenant-Governor in Council, under the provisions of Cap. 190, R. S. O., a proceeding which may tend to create unnecessary alarm. No power is given to the mayor or authorities of any place to prevent the landing of passengers from a supposedly dangerous steamer or other conveyance; but under the Health Act of 1882, sec. 15, power is given to the local health authorities of the place from which such conveyance goes, to prevent its starting. In case, however, the mayor or Health Board of such place refuses to exercise that power, and in case it appears, on information received by the Provincial Board of Health, that the landing of passengers from such conveyance would be dangerous to the public health, the departure of such steamer or conveyance may be prevented by an Order in Council under the seal of the Lieutenant-Governor. In the case referred to the efficient and active Health Officer of Windsor, Mayor Coventry, gave such satisfactory information as to the complete isolation of all cases of Smallpox in that town, and as to the thorough surveillance of all exposed persons, that further action on the part of this Board was not deemed necessary.

As it may not in all cases be possible for such Executive action to be taken by the Government in time to prevent the anticipated mischief, it seems wise to consider whether some more general legislation on the subject would not be advisable.

2. *Immigrant Inspection Service.*—Another subject which may be noticed under this chapter, is that of Immigrant Inspection Service. As the whole matter is reported in Appendix E, corresponding to Chapter V., the Board need not here do more than refer to it. Briefly the matter of immigration inspection may be stated as follows:—

Amongst the thousands of emigrants from the countries of Europe embarking for Canadian or United States ports, there are occasional cases of Smallpox in the incubative stage received on the ocean steamers. These generally pass into the second stage of the disease on shipboard, thus inoculating many others with the virus; and it has frequently happened that interested steamship companies, not being desirous of remaining in quarantine, have managed to suppress the knowledge of the disease being on board; or, as the incubative stage of Smallpox may extend over a period lasting from ten to fourteen days, it may not have appeared on shipboard, and in either case persons who have been exposed to the virus are allowed to travel westward toward their destination, the result being that they either become sick *en route*, communicating the disease to many others in the crowded trains, or, if not along the route, they carry it to be spread in the place of their destination.

Now, it will readily be seen how dangerous such a state of affairs may become to the public health, and how necessary it is that some united, extended and systematic inspection of such immigrants *in transitu* to the west be carried out. As will be seen in the report of the committee, a conference on the subject was held at Port Huron, in May, for the consideration of a scheme of international immigrant inspection. This idea has been supported and acted upon by the National Board of Health of the United States, in conjunction with various railway and steamboat companies and the Boards of several States and cities of the Union. But as yet nothing has been done in the Dominion, unless it be a very imperfect system of quarantine at the ocean ports; while no provision has been made either for the inspection or taking charge of immigrants taken ill *in transitu* to the west, except at Toronto, where an inspection is made under the auspices of the Ontario Government. The intent of such inspection is, however, especially to take charge of immigrants who may be actually suffering from various forms of disease. Under present arrangements it is not natural to suppose that, in the case of patients ill with Smallpox or other contagious diseases, the Government medical officer at this point will assume the responsibility, under the powers at present vested in him, of providing against the spread of such diseases, there being no regular quarantine hospital nor other provisions for that purpose.

This work is clearly one which should be performed by the Dominion Government; and it would seem only proper that a thorough inspection service should be established before the tide of immigration has set in for the coming year, by appointing inspecting officers at various points along all the main lines of travel from the seaboard westward, who, as suggested in the report of the committee, shall board trains at various points, inspect the passengers along the route, and in cases of disease have the patients isolated, the train disinfected, and where the disease is Smallpox, have all unprotected persons vaccinated. It is only by some such system, inaugurated and worked out on an international basis, that there can be prevented the introduction into the Dominion of diseases which may be the causes of epidemics whose extent no one can venture to foretell. The matter has been brought in various ways under the attention of the Dominion Minister of Agriculture, and it is to be hoped that the Federal Government will not delay in taking such general action as shall make unnecessary the quarantine against Canadian trains having infected passengers, which has been threatened by the Health Boards of some western States largely interested in the matter.

3. *Communications regarding Nuisances.*—The following are examples of some of the more important communications received by the Secretary, on which the Board has been invited to take action:—

1. A correspondent wrote stating that a Local Board of Health had been formed in his town, which had undertaken the task of remedying the evils arising from the presence of certain mill ponds, containing much decaying refuse and stagnant water. He further stated that parts of these ponds were situated in an adjoining municipality, and desired to know whether there was any legal machinery by which this municipality might be compelled to take action along with the town for remedying the evil. An answer, pointing out that there is not at present any legislation which would compel such joint action on the part of the contiguous municipality, was forwarded to the clerk by the Secretary of the Board.

2. A correspondent wrote that Diphtheria had been prevalent in his town for months, causing many deaths; that the sanitary condition of the town was very bad; that there were exposed water-closets, bad drainage, bad water, and a stagnant creek in the town; that the corpses of patients dying from the disease had been exposed at public funerals; that the papers of the town had systematically hushed up the matter; and that a Local Health Board was in existence, but had not taken active measures.

3. A village clerk wrote that in the village there are two or three graveyards "*crammed*" with graves; that wells near by are used; that the soil is sandy and porous, and he fears that drainage from the graveyards into the wells is very common. He advised that further burial in such graveyards should be stopped.

4. A correspondent complained that from lack of sewerage in the city, cellars are flooded and a general unsanitary condition prevails.

Many others of similar import might have been given, but such examples are sufficient to indicate the many and varied questions which have come before the Board. The action of the Secretary in all such cases has been to direct the attention of the municipal authorities of the respective localities to the matter, requesting them, in those cases where such conditions prevailed, to carry out the powers vested in them as Local Boards of Health. In most cases, it may be stated, these powers have been exercised.

Complaints of minor nuisances of various kinds were received by the Secretary, some of them referring to the existence of tanneries in proximity to places of business, to the detriment of the latter as well as of the health of the inmates of such places; complaints from a town Health Officer, of his vain attempts to get judicial action taken in the prosecution of offenders against health by-laws in the cases of non-cleansing of drains, of the unhealthy condition of school-houses, etc.; the opinion of the Board asked for concerning the bearing of the Health Act on the question of establishing a glucose factory in a municipality in defiance of a village by-law prohibiting it; and another somewhat important instance, where several complaints have been made against the nuisances created in different localities near cities by the spreading of night soil, insufficiently deodorized, over land in contiguity with dwellings; others against piggeries in proximity to dwellings, etc.

There is, however, a great difficulty in getting action taken in many instances, owing to the fact of no Local Health Board having been instituted, and no Health Officer having been appointed. Cases of real nuisances existing in municipalities have come under the notice of the Secretary where, owing to members of the council not being personally interested, the difficulty of getting township councils together in the summer season, and then, even if assembled, of obtaining speedy and effective action, strongly point to the necessity of some more definite measures being taken, requiring every municipality, or several adjoining municipalities, to have a Local Health Board, and a Health Officer permanently appointed, one who would possess the confidence of the community, both as to his efficiency and integrity.

CHAPTER VI.

COLLECTION OF STATISTICS OF PREVALENT DISEASES.

The Necessity for such Statistics.—M. Jules Guèrin remarks, "That the study of epidemics, submitted as yet to too few regulations and left too much to individual choice, has never rendered the service it is capable of yielding to science and mankind.

"It results from predominance of some great epidemical cause, that all the diseased individualities in the same epidemic have a general and principal resemblance, and exhibit only particular and necessary differences.

"As a consequence of this fact, epidemics become immense centres of observation in which the extent, number, and diversity of the facts, and the variable condition of their manifestations are constantly throwing light upon the most obscure problems of disease."

But, as remarked by Dr. B. W. Richardson, "when we look around at the progress which has been made toward the perfect comprehension of such epidemic disorders, we see no system as yet developed that promises anything like a successful attainment of objects as beneficent as they are great. The majority of observers, indifferent as to causes of disease, are content to rest their exertions on the remedial department of their art, in curing those conditions which ought never to have been permitted."

Further, quoting Dr. Richardson's words: "The study of an epidemic admits of being pursued at two different times: first, when the epidemic is present and is supplying data; second, when it has passed and the data have been supplied.

"I believe, indeed, that half the want of success that has appeared in the study of epidemic diseases has arisen from the fact that by the majority of observers the diseases are only thought worthy of consideration at such times as they may be present. Hence we see, during a serious epidemic visitation, all thoughts aroused and every eye observing; but no sooner has the visitation fled by than, as if wearied outright by the duties of the task, all thought rests and every eye sleeps."

Actuated by the conviction that in the relation of diseases to their causes, and the measures to be taken for the diminishing and uprooting of these very much indeed has yet to be learned and set in action; that, as remarked by Dr. Richardson, very little indeed of systematic extended observation of the conditions present, when epidemics prevail in the community, has been carried on; and that the state of the public health, in its relation to the evil influences of zymotic diseases demands that some extensive, long continued, and correct system be adopted for the registration of the prevalence of the various diseases which so materially increase the mortality within this Province, the Board of Health appointed a committee for the purpose of maturing a plan with this most important object in view.

As will be seen in the report of this committee, as found in Appendix F of this Report, a scheme was proposed embracing the following among its chief features:—

1. A circular was to be sent to a number of medical gentlemen as generally distributed as possible throughout the Province, in which were stated the objects of this scheme, and inviting them to coöperate by undertaking the task of becoming weekly correspondents of the Board, and reporting to its Secretary on printed forms the prevalence of various diseases in their practice. The following is a copy of the circular sent:—

TORONTO, July 17th, 1882.

DEAR DOCTOR,—You may have observed that the Provincial Board of Health, in common with many Boards in the United States, has decided upon publishing a Weekly

Report of disease prevailing in the different parts of the Province, noting, at the same time, the accompanying meteorological and other conditions.

In order to make such reports of any real value in investigating the causes of disease, it will be necessary for the Board to appoint, in various localities, correspondents whose weekly returns may enable it to deduce practical conclusions therefrom.

To this end the Board has addressed this letter to a number of medical practitioners throughout the Province, and it requests you to consider whether you will accept the position of correspondent to the Board from your district.

Leaving out of view the bearing of the proposed work upon questions of Sanitary Science, and looking at it from a purely professional standpoint, the investigations to be made as to the causes and nature of disease will be as important to medical practitioners as many others in which they are engaged and to which they gladly devote more time. The filling up of the blank forms will require only a few minutes each week; and should you be willing to devote that time regularly to it, be kind enough to inform the Secretary at once, so that there may be sent to you stamped forms similar to the one enclosed, and a blotter for your convenience and subsequent reference. Should you decide that you cannot do so, you will confer a favour by informing the Board of some medical practitioner in your locality who, in your opinion, would be willing to undertake the work.

The reports and remarks of correspondents will be treated as confidential, a general average of all the reports being published, and the Board exercising discretion in mentioning the names of particular localities.

Although this work, like that of the Meteorological Reporters in Ontario and of the Disease Reporters in many States of the Union, is done gratuitously, yet this Board trusts that the measure of good accruing from this scheme will be such as to encourage it to expect, in the near future, greater pecuniary facilities for making the reports and the results to be obtained therefrom more nearly perfect.

Trusting that you may find it convenient to co-operate with the Board in this matter,

I have the honour to be, Sir,

Your obedient servant,

P. H. Bryce,
Secretary.

Of the gentlemen addressed a very considerable number responded, expressing their concurrence in the objects of the Board, and, all but one or two, their willingness to become its correspondents. The Board, finding that its efforts in this direction were readily assented to by so many prominent practitioners throughout the Province, proceeded to prepare the details of the system. These briefly were as follows: The blank form as seen in Appendix F, Article I., was printed, in which are given thirty-nine of the most important diseases known to be present in this Province.

The three columns on the right hand are intended for the insertion, respectively, of the number of diseases actually existing in the practice of the correspondent for the week of which it is a report; of their severity, as indicated by the signs (=), (+), (−), meaning respectively the average, more than the average, or less than the average; and for the degree of prevalence as indicated by the numeral standing in the column "order of prevalence" opposite each disease.

On the opposite page of the form there are ruled columns for the insertion of any prevalent diseases not named in the list given. By the courtesy of the Postmaster-General these forms are allowed to pass as printed matter, thus materially lessening their cost.

The forms having been stamped are sent in conveniently sized packages to the various correspondents, by whom they are filled in on Saturday evening with the cases of the past week, with any additional remarks which the correspondent may deem important, and then having been closed by the counterfoil, are posted to the Secretary of the Board, whose address is printed on the outside. The Secretary then begins to enter the returns, as fast as they are received, in columns similarly ruled, waiting till the last

mail on Wednesday of the week following that for which the Reports are made. It will readily be seen that the immediate value of any report depends upon its being received by the above date. The Secretary has to express his thanks for the prompt returns of his many correspondents, there being rarely more than three or four Reports too late for use.

A circular of instructions was issued by the Board to each correspondent in order to promote uniformity in reporting; and the Secretary takes pleasure in stating that very few defects in this regard have been found.

The reports having been received by the Secretary, the work of collating them has to be proceeded with. This entails a very considerable amount of labour, since their value depends largely upon the degree of accuracy observed in this work. This having been completed the issue of the *Bulletin* is then carried out.

A few remarks may not be out of place as to the methods employed by the Board in collecting the information on which the *Weekly Health Bulletin* is based, and as to the distribution of them; and also as regards the number of the reporters, the relation which the sickness reported by them bears to the total sickness of the Province, the general character of the distribution of this sickness throughout the various districts, the regularity and accuracy of the reports, and the different other points on which their value may be supposed to depend.

The Board could not attempt to collect reports of all the sickness occurring in the Province without expending thereon an undue proportion of the Legislative grant placed at its disposal. It was therefore deemed advisable to adopt such a system as would give regularly, from time to time, fair samples of the nature, character and amount of the diseases existing in the various districts, by selecting places pretty evenly distributed throughout the Province, and by obtaining from them reports regularly furnished by gentlemen engaged in general practice. Although the Board is always very glad to avail itself of the assistance of any gentleman feeling special interest in this work, still it was thought that by thus selecting *places* a more even and general distribution could be obtained than by making a general call for volunteers. A list of such places having been made, the members of the Board, at one of its meetings, suggested the names of gentlemen occurring to them at the time, who they thought would be willing to report regularly, and whose practice is of a general character. It will readily be understood how vacancies in the list of reporters had to be filled from time to time by the Secretary writing and asking gentlemen to undertake the work. So soon as the usefulness of the system shall have impressed itself upon the people, and there shall be a larger amount of money at our disposal for the purpose of collecting and collating a greater number of reports, the Board would desire to obtain, through county and other medical societies, the names of more gentlemen willing to furnish them. At present the average number of reports received weekly is close upon one hundred—a number which compares very favourably with that received by any other Board engaged in similar work.

A careful examination of the map and the various lists and compilations on it, together with the remarks which have been made above as to the selection of localities and as to the character of practice in which the reporters are engaged, will sufficiently indicate the relation which the sickness reported bears to the total general sickness throughout the Province. It may be added that not only are reports received from the central and more populous districts, but the new portions of the Province, such as the Muskoka and Parry Sound districts, and the northern counties in the Ottawa region are all represented, and well represented; and one reporter, with a humanitarian and professional *esprit* worthy of universal imitation, sends in from the far off *Thule* of Prince Arthur's Landing his weekly quota to the scheme of the Board; and though it is not possible to utilize his reports in the *Weekly Bulletin*, still they are very valuable, since they supply data for the more extended study which will be made of the reports as the extent of time for which they are returned increases.

The last point to be noticed here is that of the regularity of the reports received. This too, the Board has much reason to be gratified with. On occasion it may have happened that some correspondent has missed sending his weekly report, but enquiry

has in most cases revealed the fact of his absence from home or personal illness. But the Board takes this opportunity of reminding those interested in the work, that as the possibility of the reports depends upon them, so the value of the deductions therefrom depends upon their regularity and correctness.

What the information is that the report is designed to give, can in part be gathered from the description already given of the blank forms which correspondents fill in. To the best method of utilizing such information the Board gave much thought and careful attention. By some it was thought best to publish weekly reports of diseases of the zymotic class alone. But, while the causes and prevalence of so-called *epidemic or preventable diseases* are undoubtedly the most important end of such reports, it was felt that, inasmuch as there are other diseases of equal or greater prevalence amongst the people, judging from the mortality returns of the Registrar-General's Department, it was most important that the climatic and other conditions coincident with the periods of greatest prevalence of such diseases should, if possible, be registered, and results from them worked out.

Another point to be considered was the frequency with which such reports should be issued. At first, monthly reports were thought advisable, but all points being considered, it was decided to have weekly reports. There were several reasons for this. The first and most potent reason was that the experience of State Boards and City Boards, both in Britain and the United States, has proved weekly returns to be most perfect and the most satisfactory. The reasons for this are not hard to find. The method adopted by many a busy practitioner of medicine in recording cases in his case book is one which while it makes a weekly compilation from it a work of a few minutes every Saturday evening, would make a monthly compilation a work of so much trouble that it would not be so readily undertaken. Again, while in cases where circumstances have made it impossible for the correspondent to make a return for any particular week, there is a certain loss: there would be a much more serious loss were the report of any correspondent for a whole month lacking. But one more reason may be given. In order to interest either the profession or the general public in disease reports, they must be brought before them frequently and in small amounts. The *Bulletin* reports of this Board have been prepared with this object in view.

The method of issuing the weekly report of disease may now be briefly considered. This too became a subject for serious thought. In addition to the first requisite that the information imparted in such a report be as accurate as possible, it was equally requisite for the accomplishment of the desired end, that it be presented in an attractive form. Hitherto the prime object on the part of other Boards in collecting disease reports has been that of compiling records and working out results in a central office, while there has not been sufficient regard paid to an equally important point, viz.: that of interesting and thereby educating the general public in the bearing of the results derived from these statistics. Hence the method which has hitherto been adopted by most foreign Boards has been to issue in circular form, printed in various ways, the names of a large number of diseases, with figures in closely printed lines, leaving to the reader, in most cases, the task of studying them closely and making his own deductions.

The almost invariable result has been that such information rarely got further than the hands of medical men, and in too many cases these reports have met the doom of much circular literature, and have passed unopened into the waste basket.

But something more has been attempted—and we believe successfully attempted—in the *Weekly Health Bulletin*, published by this Board in the form of a map. Its objects briefly stated are:—

1. To give an accurate report of at least six—the method leaves room for as many more if it be thought advisable—of the most prevalent diseases for the week.

2. A division of the Province into ten districts has been made for purposes of comparison. This division, as stated in the Circular of Explanation issued with the map, is based upon differences in geological formation, and meteorological conditions due to (*a*) difference in height above the sea level, (*b*) difference in prevailing winds, (*c*) difference in rain and snow fall, (*d*) difference in forest areas, and (*e*) proximity to large bodies of water, marshes, etc. Thus it will be seen by the map printed in this Report,

for the week ending January 13, 1883, in addition to each of the six diseases most prevalent in each district being shown in its respective place with its per cent. of the total recorded cases for that district, there are diagrams, in which a summing up of the various diseases of all the districts is made, and the comparisons of various diseases may be caught at a glance by him who has once studied the map for a few minutes. It further gives the average of the meteorological conditions prevalent in each district and the important information of its height above the sea level.

3. A briefly printed summary of the information given upon the map and some important inferences drawn from it are given each week.

4. The map serves the purpose of exactly pointing out the extent of each district and the situation of the counties and most important towns of each.

5. It has been a primary object in preparing the report in the form of a map to make it attractive and then instructive ; since the very essence of a Provincial Board is to become a public *legislator* in matters pertaining to the public health by previously being a public *educator*.

In this connection the Board cannot but express its gratification, at the favourable manner in which the *Weekly Health Bulletin* has been received by the members of the medical profession, and the public of the Province, as well as by prominent sanitarians in other countries; whilst some hundred correspondents have shown, by the time and trouble they have devoted to the scheme, the interest they have taken in it, and the importance they attach to it.

In the distribution of the Bulletins, the question of expense again enters. Although the cost of them is very little more than of the simple slips issued by other Boards, yet it would, if they were sent regularly, even to all the members of the medical profession, amount to a very considerable sum : it is therefore sent to those upon whose efforts it is based—the regular reporters—and they are asked to place it, when they have perused it, in the post office or some other conspicuous place, where it will be subject to the inspection of the many. It is also sent to hospitals, colleges, and other public institutions ; and lastly to any person sufficiently interested to ask for it. Very many individuals have applied to the Secretary for copies of the "*health map*" as it is commonly called. To such an extent has this been the case that the weekly issue has reached a number exceeding 500 copies.

In concluding its remarks regarding "weather and health," the Board would desire to express its sense of the obligations under which it is to Mr. Charles Carpmael, M.A., F.R.S.A., Superintendent of the Observatory, and to Lieut. A. R. Gordon, R.N., and other gentlemen connected with that institution, for the weekly reports of meteorological conditions they have been so good as to furnish, and which are so valuable to the Board and to all other persons who have made them a subject of study in connection with coexisting diseases.

CHAPTER VII.

THE RELATIONS OF THE BOARD.

In the establishment of a department, whose province and very *raison d'être* it is to undertake the difficult office of preventing the outbreak and spread of disease, a step has been taken, the exact bearing and significance of which are not at once, by a mere casual glance, fully comprehended. It is the recognition of the principle that the State may and ought to exercise a paternal care over the health and lives of the people, not in any fitful or accidental manner, as during epidemics of disease, but in a daily supervision of the habits and manner of living of individuals and communities, in everything that tends to affect favourably or unfavourably the material well-being of the people, to speak of nothing more.

Hence it must be plain that inasmuch as the Government has delegated this power to a Board presumably, from its professional status, competent to advise in all matters pertaining to health, its responsibility is, of necessity, of the highest and most extended nature. Its relations to the people are many and ought to be intimate. As the work of the physician is largely of an individual and personal nature, so must also be that of a Board, which is engaged in a work with the intent of saving individual lives, as a unit in the body politic. But on the other hand, inasmuch as there are numerous problems bearing upon the public health, which have to do with conditions of health external to the Province, with epidemics existing in other lands, and the social and climatic conditions upon which their development depends, it is readily seen how relations must exist between this Province and other countries; between the Provincial Board and other National and State Boards of Health; and that these relations ought to be cordial, close and mutual.

In discussing then, the relations of this Board, we would refer to:—

1st. Relations to the State.—When the State, through its Government, undertakes the execution of any work, it does so with due regard for (*a*) the necessity and urgency of what is to be done; (*b*) the means for the carrying out of such work; (*c*) the difficulties to be overcome, (*d*) and the benefits accruing from its successful accomplishment. In like manner, when it deputes its work to individuals or to a Board, they are supposed to undertake the work with a full appreciation of the various points which present themselves to the Government or primary administrative authority.

(*a*) *Regarding the necessity and urgency of the work to be done.*—The report of the various investigations noted in a preceding chapter, and of the large amount of correspondence carried on concerning many health matters, show how much sanitary work there is to be perf rmed. The Board in comparing the local sanitary arrangements existing in this Province with those of States where similar Boards have been in existence for a length of time, recognized the fact that there was great need for extending its operations as far as possible into every municipality of the Province. But this had to be attempted with a due regard for,

(*b*) *The means for carrying out such work.*—Evidently, as in the case of any Governmental undertaking, this Board was supposed to work with such means at hand as would make such work practicable. The means in this case were, as in every other, first a money grant, and second, sufficient legislation. The first was supplied by a Parliamentry Act, and the second was in a large measure in existence. While in some respects slation may have appeared insufficient to some, yet, doubtless some regard was b e had for,

(*c*) *The difficulties to be overcome.*—It may have appeared inadvisable to delegate too much power to any central Board. The difficulties apparently in the way of any such work are of two kinds: the one that of overcoming any jealousy which communities

might feel of what seemed an interference with municipal rights, and the other that of pressing upon municipalities the expenditure to some extent of money for the perfecting of local sanitary organizations, and for the removal, when found necessary, of local unsanitary conditions. However, the Board has found it possible to do much, even under existing laws, and thereby pave the way for greater facilities in this regard.

As already stated the whole of the work has been initiated and undertaken with a view to the benefits accruing from its accomplishment. That something in the way of results has been obtained, the previous chapters of this Report would seem to affirm; but that much—very much—yet remains, must be equally evident from what has been stated. Though some municipalities have in some degree assumed their responsibilities and duties in this regard, yet so much remains to be done in most communities that the Board feels that in this respect its work is hardly more than commenced, and urgently seeks for additional legislation by which its relations with municipal Boards will be more intimate and real.

2. *Relations to Foreign States, and State Boards.*—In various ways it has been shown in previous chapters that health matters are, from their very nature, of so general a character, and the principles underlying them so universal and so generally applicable to mankind under all circumstances and in every climate, that of necessity what in other countries affects the public health must to a large extent influence this Province. Not only is this true, but there are health conditions present in many foreign countries, notably the United States and those European countries with which there is much commercial intercourse, which have direct relations and potent influences upon the health of the people of this Province also. From these relations and influences, whether injurious or otherwise, we cannot escape if we would. In some ways, indeed, the health of countries commercially or geographically close to each other is similar to the meteorological conditions which, prevailing in one country, affect those of some contiguous land. Hence it is that we find that when some general and wide spread epidemic of disease is present either among men or animals in such a country, it very frequently spreads itself to some adjoining one. These being facts acknowledged on every hand, it will be seen that it must be an object of this Board to make its relations with foreign Boards and health authorities close and mutual. Especially must this be the case in all that concerns international inspection of immigrants, and quarantine regulations. The latter would be to a great extent unnecessary if some thorough system in the former matter were adopted. It has already been explained in Chapter V. upon what basis an Immigrant Inspection Service may be made thorough and complete, were all countries concerned to act in concert. But not only in these respects is it desirable that these relations should be intimate, but, in many matters the Province may learn much from the lengthened experience of Boards of Health in Britain and the United States; while in some ways the older lands may learn from the energy and progress of new countries, unfettered by prejudice and tradition. These relations have, we are happy to state, been very generally established by this Board. Through the visits of inspection of its members to Boards in the United States, very complete information has been obtained of the methods of working adopted by these in various States and cities. A large number of very valuable Reports have been received from both Britain and the United States, wherein are found compendia of health enactments and the transactions of other Boards, which will materially assist us in our work. It may also be inferred from our list of exchanges of medical and other magazines, and of various documents obtained from many foreign Boards, that in this way, too, the information received has been largely supplemented.

These relations, then, it will be seen, are of such a nature that it is incumbent upon this Board not only to sustain them but to increase their intimacy.

3. *Relations to Local Boards of Health.*—In the Act of 1882 it is enacted that the Secretary of the Board shall communicate with the Local Boards of Health and Health officers within the Province, and with municipal councils and other public bodies, for the purpose of acquiring or disseminating information concerning the public health; and that he shall also use such means as are practicable to induce municipal councils to appoint Health officers or Local Boards of Health within their municipalities.

Within this clause is contained what this Board feels to be one of the chief duties

which devolve upon it. It is upon the extent, closeness and vitality of this relationship with Local Boards that the real and essential success of this Board as an agent in the direct advancement of the public health must depend.

The means which have been adopted, with the object of making this union complete are various. At the first regular meeting of the Board a circular was drawn up and addressed to clerks of municipalities, asking their coöperation in the objects of the Board, enquiring if they had taken advantage of the powers given them by the Health Act of 1874, to establish Local Boards of Health, and inviting them to report to the Board concerning the sanitary condition of their various municipalities.

We regret to say the replies were not so numerous as they should have been. This seems to have been, in some cases, due to neglect on the part of the clerks to present the documents to the Council. Furthermore, there are numbers of municipalities where Local Boards of Health have a nominal existence, but it has been found that it is just from places where Local Boards are most active that information has been received. That such an undesirable state of affairs should be remedied is evident, and that in every case where occasion has called upon this Board to visit localities, expressions of the same sentiment have been made is equally true. But many causes have combined to produce this result. In most cases we must believe that lack of information as to the real nature of the constitution and work of the Board, and an indifference as to the objects sought, have been the chief reasons why municipalities have not placed themselves in closer and more constant communication with this Board. What is to be done? Educate the people, doubtless; but more than this will be required. As in matters bearing something of a scientific character, it has ever been necessary for the Government to teach and lead the people, so in this. Everywhere it is found that the educated and intelligent members of our communities recognize the necessity for sanitary work, and the wisdom of instituting means for carrying it out. Shall not such opinions prevail?

4. *Relations of the Board to the Medical profession.*—Here and there it has been occasionally remarked that the medical profession does much charity work at present, and that it is not just to ask them to do more, especially for the Government. But in the matter of Disease Reports it may be enough to state some of the reasons why the Board does not deem it wise at the present time to ask the Government to set aside a sum for this purpose.

(1) Assuming that at least one hundred correspondents, at the lowest estimate, are necessary in order that we may obtain correct returns, it would follow that at the rate of one dollar per weekly report, the Government must set apart $5,200 for this purpose alone; a sum for which the country is not at present prepared.

(2) Again, some have said that by paying correspondents such a sum they would be able not only to report their own practice but that of surrounding practitioners. It is needless to point out to the profession the many difficulties which would prevent medical men in various districts from reporting *uniformly* the cases of their fellow practitioners. And even could it be done, and were such a reporter willing to do this extra work for the pittance proposed, surrounding practitioners would naturally wish a similar sum for their reports, since a discrimination, invidious to them, is at once made.

For these and other reasons the Board trusts that gentlemen proud of their profession, and anxious for its scientific advancement, will continue the work of Disease Reports so auspiciously inaugurated, and which is being so successfully carried out.

It may be remarked, however, that should the time soon come when every municipality shall have its Local Board of Health and Health Officer it may be found possible to make this latter functionary the local receiver of reports from the medical men of his district, to have them summarized by him, and the results forwarded to the Central Office of the Board, there to be collated and have inferences drawn from them.

5. *Relations of the Board to the Public.*—What has been said with reference to the relations of this Board to municipalities applies equally to the public in general, yet inasmuch as the opinions of the individuals of any community, after all form those of its municipal government, it is of the greatest possible importance that the public as individuals should not only know the existence of, but also take an active interest in, the

progress and work of this Board. It has naturally followed that the Board has adopted every means in its power to make known its work and aims, by the wide dissemination through the press of the Province of sanitary information, by the issue of pamphlets and circulars to the clergy, High and Public School teachers, and their Inspectors; by a Sanitary Convention, at which the public were invited to take part in its discussions and deliberations, and by the delivery in a number of places of lectures by members of the Board, and by the Secretary who, by the terms of the Act of 1882, is required, as Chief Health Officer of the Province, to use such means as are practicable to induce municipal councils to appoint Health Officers or Local Boards of Health within their municipalities. That these various means have been an important aid in establishing the close and intimate relations between the Board and the general public, which on every side are growing up, we have every reason to believe; and that these will constantly go on increasing we have no reason to doubt.

If we but glance at the position which the city Boards of Health spoken of in the Report of the Commission to New York, Boston and Albany, hold with reference to the people, we are almost surprised, certainly gratified, to see how gladly and willingly the latter submit to and acquiesce in the measures which these Boards have adopted in the interests of the public. But if we further examine the workings of State Boards, such as those of New York and Michigan, we become aware of how intimately connected with the every-day life of the people are the various enactments and regulations of these Boards. The people, through their representatives, appoint everywhere Local Boards of Health, to whom they look for the guardianship of the public health. But they have gone further in some instances and said that, inasmuch as medical men, by their professional training, are the safest guides in matters of health, on this account their Health officers shall be medical men. Not only this but the people for their own good submit cheerfully to the necessary expenditure. They submit to what some people might call an invasion of individual rights, when, in cases of occurrence of infectious disease, they notify the Health Boards of the presence in their families of such disease, and are placed under various degrees of surveillance, according to the danger of contagion with which it may be attended. They admit that it is a mistaken idea of freedom and independence to suppose that the individual should be allowed to follow his own ideas, no matter how unwise, in such cases; and that such freedom degenerates into license. It is indeed a high development of social science which admits that it is better for the individual to submit to a temporary isolation and supervision, than that the body politic of which he is a member should be injured to an indefinite and unknown degree from its absence. By referring to the report of Dr. C. W. Covernton, Commissioner of this Board to England (to be found in Appendix B), it will be seen that the British mind, although possessed of that sturdy idea of independence epitomized in the remark of Micawber, when, having slammed the door in the face of the bailiff, he exclaimed "Every Englishman's house is his castle," is nevertheless rapidly yielding its adhesion to what is after all but a higher and more extended development of the principle; it is by degrees admitting that every Englishman's town and country is his castle; and that in order to avoid the sad concluding words of the despairing Wilkins, when he ejaculated, "I may say, emphatically, Micawber's a wreck!" it must no longer disregard the laws of public health, but must yield to the utilitarian principle, involved in the fable of "the belly and members," which Menenius Agrippa enunciated as a principle of sociology as long ago as the early days of the Roman Republic, namely, that what is in the highest interests of the State must finally prove good to the individual citizen.

CHAPTER VIII.

WORK TO BE DONE.

In concluding this report of work done by the Board during the past year, having given some account of the varied nature of the work initiated, and considered wherein it has been successfully accomplished, and wherein partially so, it seems natural that some reference should be made to work yet to be done. If we look about us and consider the many varied and diversified agencies, tending to the production of disease and death in any community, and place them all in the category of *work to be done*, we are not only staggered at the herculean task which is before us, but we

"Raise lame hands of faith,"

and, feeling our utter impotence, can find courage only in the thought:—

"Do well your part, therein the duty lies."

These foes to health are everywhere—in the daily life of the individual, in social life, in commercial and in public life. Immoral and vicious personal habits everywhere abound; false social customs prevail on every hand. Commercial life, with its eager seeking after wealth, causes in too many cases, a disregard for the physical laws which regulate and promote the well being of both body and mind, while public life is in too many cases so surrounded by the conventionalities and traditions which have descended from times when physical laws were very imperfectly understood, that it lays its burdens too frequently upon men who falter and finally fall under their Atlantean loads.

But while sanitary science may and does very properly embrace all these questions, and finds them most properly coming under her *ægis* on their physical side, still, inasmuch as she finds firm allies and workers in these fields, in the pulpit, and on the platform, as well as amongst the people everywhere, she may very well confine her present labours to questions with which she alone can deal.

In alluding to some of the work most urgent and necessary, the Board would refer to:—

1. *The establishment of Local Boards.*—So much on this point has been already incidentally referred to in discussing various matters which have been mentioned in preceding chapters, that but little needs to be added here. Everywhere they are necessary, and this Board will never rest satisfied that its progress is real until it knows that such a Board is existent in every municipality. Such Local Boards must occupy the place, in relation to this Board, not of an army reserve but of the fighting arm of the service. Not only this, but Health Officers of these Boards must be everywhere as sentinels loyal to their cause and efficient in action. Such Boards do exist at present in many places in name, and in some places are active and energetic in promoting health; but how much is required in this direction may be understood from what has already been said. Everywhere their need is admitted, but indifference has hitherto marked too strongly municipal action in this regard. Hence it has seemed to this Board an absolute necessity to recommend such legislation as shall make it incumbent upon every municipality to have, either separately or combined with some neighbouring municipality, its own Local Board of Health, and not only this, but an efficient Health Officer. Britain and many States of the Union have preceded Ontario in this work; but shall it not be that, as this Province takes pride and rejoices in the high status of her educational and other municipal institutions, she shall, having once begun to act in the matter of public health, act thoroughly and efficiently?

2. *Dissemination of Sanitary Information.*—As has been stated already in this Report, the methods adopted toward this end during the past year have been varied and

extended. With a hearty coöperation—in fact with a zealous enthusiasm—a large number of the leading journals of the Province have published, from time to time, articles referring in most complimentary terms to the work of this Board, and to the general subject of sanitary work. Not a dissenting voice has been lifted up against the necessity for improved and advanced methods for promoting the public health; while wherever members of the Board have gone, expressions of hope for the good to be done have been made. In some cases, indeed, there has been disappointment that this Board has so little executive power, municipal Health Boards being too directly dependent upon personal influence to act as they should sometimes do against individual or even class interests.

In addition to the above means of disseminating information, a Sanitary Convention has been held, the proceedings of which were extensively published in the leading journals. More of these conventions are needed, not necessarily carried on by the members of this Board, though they will ever be found willing and anxious to lend aid and countenance to such meetings. No better method than this, which elicits discussion by interesting the public, can be found for disseminating, and giving a practical turn to, sanitary knowledge. The various lectures before referred to have tended in the same direction; while these addresses have been followed by resolutions moved by citizens, in which convictions have been expressed on all hands as to the necessity and value of the work in which the Board is engaged. This work is one which has been little more than begun. Medical men everywhere ought to join in it, and in some cases have done so; while many others doubtless would, were it not for the false idea that educating the public in such a way might be characterized as an unprofessional method of gaining notoriety.

To these methods may be added another which has been carried out very largely during the past year, viz.: that of the dissemination of accurate knowledge on several subjects by means of pamphlets. But however valuable this work may be it is necessarily imperfect. The principle, involved in affirming that such education is necessary, ought to be carried to its legitimate conclusion by having it more generally imparted in our schools.

Although it be true that it would be a most unsanitary procedure to increase the already full list of subjects upon the curricula of our schools, yet it does seem that some method might be adopted by which even comparatively young classes might be taught truths relating to their own health, largely by means of experimental illustrations and charts, of such a nature that it would not require any great mental exertion. Some such idea has already been adopted. It is to be hoped that means may speedily be found for putting it into practice. A larger text-book or manual for the use of students, teachers and the general public is much needed. It ought to be comprehensive, yet concise, and while not technical, yet scientifically correct.

3. *Carrying on of Sanitary Surveys.*—Whatever may have been the original primeval condition of the various portions of Ontario, whether, as in most cases, it has been heavy wood-land, with rivers and streams everywhere, or whether as in certain of the south-western portions it has partaken of a swampy, and in restricted areas, of a prairie, character, it is in both cases equally true that settlement has produced great changes in the surface of the country, affecting the character of the different districts, sometimes favourably and sometimes the reverse. These changes have been effected silently, and generally unnoticed, by the busy pioneer of settlement, and it is by conversation with some old man whose life has been absorbed in this work, that the broad differences between past and present, are brought prominently into view. In nearly every case the listener is informed that before much land was broken up the country was almost free from *malaria*, while others can mark the year when ague appeared along the river bank or valley of some stream, with the damming up of it for milling and lumbering purposes. Again sad memories recall the fatal year in which an epidemic of Scarlatina or Diphtheria swept over the settlement; but in every case the results only are remembered, while the conditions which aided the spread of such scourges being unknown, have passed unnoticed. Such, in brief, has been the history of every district of the Province; circumstances have produced changes of greater or less extent, everywhere. The forest land in places has been almost denuded; winds sweep over the country

with their violence comparatively unchecked by any wooded territory; large streams have become greatly reduced in their volume, while towns and villages with their rising manufactories, tending to render impure the waters thus diminished, have everywhere grown up along their course. In other cases the necessities of lumbering have, in the new country, raised the water of almost every stream during certain periods of the year, creating large tracts of drowned land, to be left as pestilential swamps during the later summer months, marked by the abundant decomposition of organic matter.

That such circumstances have produced profound changes everywhere in the climate and local conditions of this Province has, by the labours of scientists, been proven before now from meteorological records.

Such changes in the surface features of the country have for several years past formed a large portion of the extensive investigations undertaken by State Boards of Health in most of the older New England and other States. Year by year something like joint action has been undertaken by several of these States, in which certain districts, especially subject to some form of disease with epidemic characters, have been as minutely surveyed as if it were for the purpose of finding the most eligible line for a railway. From such labours much accurate information is annually being accumulated, and local sanitary improvements are constantly following. Few undertakings would be more likely to benefit the health of the Province, and redound with credit to the practical character of the work of this Board than if some such labours were undertaken under its direction. Surveys are frequently undertaken for the benefit of settlement and the production of provincial wealth: why should further ones not be initiated for the purposes of health, which in every sense is likewise wealth? By such a system, gradually carried out, an incalculable amount of knowledge would gradually be accumulated upon which municipalities, as circumstances might seem to demand, would undertake and carry out local sanitary improvements. Such a survey would supply accurate information of the unhealthy conditions produced by the obstruction of water-courses, and hence direct attention to the necessity for their gradual removal, and the consequent lessening of their injurious effects; it would point out the evil results of pollution of rivers and streams, and suggest remedies for abating the nuisances created thereby; in newer districts it might serve to prevent settlement in what might eventually prove ineligible and unhealthy localities; and finally in all cases it would serve as an educating medium by which the people being taught to observe the necessity for sanitary precautions, would soon learn the advisability of adopting them.

4. *Sewerage Systems and Water Supply.*—In the development of municipal government under the influence of the progressive tendency of modern civilization in cities, towns and villages, modern improvements and conveniences are among the chief points towards which action is being directed. How readily such improvements are carried out may be seen by comparing what has been done in many towns and cities in Canada, as well as in the United States, with the slow progress which is seen in many Continental countries, hampered as they are with vested rights and traditional conservatism. That utilitarian spirit characteristic of western colonization, is quick to see, and rapid in taking advantage of, whatever seems to be a step in individual and public advancement. Among the chief evidences of this are the establishment of systems of lighting by gas or by electricity, of public drainage, and of public water-supply. Naturally, however, the methods for carrying out these have not always been either thorough or well-advised, inasmuch as all of them are based upon scientific principles, which have not been sufficiently understood by the municipal authorities undertaking them; or some predominating self-interest has prevented their having been thoroughly executed. This has been especially the case with the systems of sewerage and water-supply which many municipalities have inaugurated. False ideas of public economy have in many cases militated against broad and comprehensive systems in the beginning, resulting very frequently in the condemnation of any system at all. Happily, however, in most cases the cogency of arguments against the utility of such improvements has lost its force, and now many places are most anxious to know the best means for their adoption. These facts have forced upon the Board the prime importance of the dissemination of some concise and definite information upon these difficult subjects.

The Board feels how imperfect at the best can be the information without due regard being at the same time had for the topographical peculiarities of any municipality proposing the adoption of sewerage and water-supply systems. But, inasmuch as the scientific principles, whether they be those of Chemical Physics or Mechanics, underlying all systems are the same, it cannot but serve a most valuable purpose if every municipality be supplied with pamphlets containing information concerning the most approved methods for the disposal of sewage, of the proper materials and shape for sewers, drains, soil-pipes, traps and water-closets, for the size of these various pipes, for their ventilation, and other points in connection therewith. It is likewise most desirable that the attention of such municipalities be called to the absolute necessity there is for attention being paid to the sources of water-supply, if such supply is not going to prove a sanitary evil under the guise of a public convenience. Sewage contamination of public and private water-supplies has proved to be a most fruitful source of disease; and it behooves all to beware lest they fall into Scylla in wishing to avoid Charybdis.

5. *Means for making Sanitary Experiments.*—Whatever progress the practice of sanitary laws has made, whatever position sanitary legislation occupies in the deliberations of parliamentary and municipal assemblies, it must be readily admitted that they are owing to the teachings which have been the outcome of scientific research. Such research has been largely the work of the present century, carried on laboriously and often in the face of the greatest difficulties; but in spite of all we rejoice in thinking that great advances have been made. But while much, very much, has been learned, it is but the earnest of what there is yet to be known.

This being the case, the necessity there is for this Board to take some part in such research must strike everyone who recognizes the work that it is expected to do. It has been given the task of looking into all which pertains to the success and advancement of sanitary measures; and it is moreover expected to speak with authority on such subjects.

6. *Ventilation and Heating of Houses.*— Without entering into any details on this subject (which may be found discussed at length in several of the lectures appended to this Report), it is without doubt true that, while the air-space in our houses is much more than is found in houses in most older countries, it is, through the very general disregard of the supply of any artificial methods of ventilation, much too little; while the necessity for the supply of warmth during the winter months has made artificial methods for preventing the introduction of fresh air into our houses, by preventing the ingress of cold air, very general. That much danger arises from the absence of fresh air is patent to everyone at all acquainted with the injurious results arising from the re-breathed air of rooms, made worse by the presence, in some cases, of gas from untrapped drains. This fact becomes more prominently manifest to the physician in visiting the houses of the poorer classes of citizens, where all these evils are present in aggravated form. To show that even at the present time the fatal effects from such causes are but slowly appreciated or—if appreciated at all—acted upon, it may be stated that in the Dublin Lying-in Hospital, up to the year 1872, the mortality amongst infants within the first fortnight was 1 in every 6 children born; and that upon the adoption of an improved system of ventilation the proportion of deaths was reduced to 1 in every 19½. Again, it may be stated that a century ago, in a London workhouse, while 23 out of every 24 children died within a year of their birth, yet after a parliamentary inquiry into the fact, resulting in an improved system of ventilation being introduced, the proportion of deaths was speedily reduced from 2,600 to 450 annually. In this highly favoured country the apparently large infant mortality would seem to show that there are sanitary defects which need to be inquired into and remedied. Thus the Registrar-General's Report for 1880 shows that out of the 19,802 deaths recorded during that year, 4,379 were of children under one year of age, or that there was 1 death of children under one year of age for every 3½ deaths of all other ages; or if it be compared with the total number of births recorded for the same year, we find that the deaths of children under one year amounted to almost exactly 1 in every 10, and in the ten cities to 1 in every 4 births.

The Board feels that the evils arising from insufficiency of fresh air are of such

magnitude as to make it imperative upon it to use every possible means to educate the people concerning its value. This, in a measure, it has already done in the pamphlet, "How to Check the Spread of Contagious Diseases;" but it has yet more to do in publishing information concerning some of the simplest and best modes to be adopted both for ventilation and heating. Too much cannot be said in directing attention to these measures, not only as prophylactics against disease, but as therapeutic means of prime importance in the successful treatment of it. They are accessible to all; but neglect shows only too conclusively that the absence of sanitary precautions is not so much due to fear of expense, or indifference, as to, in many cases, an utter ignorance of the principles lying at the root of all progress in this regard, and of the dangers arising from the absence of sanitary methods.

But of the extent and character of what remains to be done in the direction of improved sanitation, enough has been said to indicate the nature of the work which the Legislature has placed upon the Provincial Board of Health, established by the Act of 1882. Its creation has laid upon the Legislature establishing it, as well as upon the Board which has undertaken the work, duties which must be performed if what is necessary is to be satisfactorily carried out. This work, so extensive in its nature and so difficult in its execution, will require not only the combined support, but the individual interest, of the legislators. From all that has been said it must be evident that the Board will have many difficulties to meet and overcome. It must expect to meet indifference as to the methods it may employ, from an ignorance, in many cases, of the objects to be accomplished. It may find its measures opposed, in some cases, by the supposed self-interest of individuals; and it need not be surprised if the public should think that sanitary legislation, and regulations for the benefit of the public health, ought in all cases to follow, rather than precede, public opinion. But if the voice of science be unanimous as to the necessity for sanitary measures being taken in the interests of public health; if the more thoughtful and intelligent of the public are one in their opinion as to the desirability of sanitary laws being passed; if foreign States press upon the country the urgency for international quarantine and sanitary regulations for mutual benefit and protection; if statistics from the most civilized States of Europe and America incontestably prove the incalculable advantages to the State from the annual saving of many lives and of the expenditure of immense sums of unproductive capital in the treatment of disease and burial of the dead; if thousands of homes desolated by the scourge of epidemic diseases, and untold memories, sad and sorrowful at the thought of what might have been had not pale death cast a sable pall over fair hopes blighted and promises unfulfilled, are not to pass unheeded; then can the wisdom be doubted, the urgency questioned, or the necessity denied, of speedy, thorough, and extended measures being taken by the firm, yet not harsh, hands of the men who guide the ship of State in her appointed course towards the desired haven—the people's good? Can there be any doubt that the people of the Province are not only willing but anxious that their representatives on the Provincial Board of Health shall have every facility forteaching, disseminating and adopting sanitary laws "lest," in the words of the motto of the Board, "the people perish from lack of knowledge"—"*Ne pereat populus scientia absente*"?

All which we respectfully submit to your Honor.

Wm. Oldright,
Chairman.

Peter H. Bryce,
Secretary.

APPENDICES TO THE REPORT

OF

THE SECRETARY

OF THE

PROVINCIAL BOARD OF HEALTH

FOR THE YEAR 1882.

PART II.

[Under Part II. will be found included a detailed account of the proceedings and work done by the Board during the past year. It includes a condensation of minutes of the various meetings, and the reports in full of the various Commissions appointed by the Board for conducting various investigations, and for collecting sanitary information from different sources.]

APPENDIX A.

Article I.

The following is a copy of the Act establishing the Provincial Board of Health:—

CHAPTER 29 (45 Vict.).

An Act to establish a Provincial Board of Health, and to give increased powers to Local Boards of Health.

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

Provincial Board of Health established.

1. A Board of Health for the Province of Ontario is hereby established, and may be known and called "The Provincial Board of Health of Ontario." It shall consist of not more than seven members, one of whom may be the secretary of the Board. The members thereof shall be appointed by the Lieutenant-Governor in Council. Three members thereof may, upon the constitution of the board, be appointed to hold office for the period of two years, and the other three thereof for a period of three years; subsequent appointments may be for a period of three years, and any retiring member shall be eligible for re-appointment. At least four members of the board shall be duly registered medical practitioners.

Salaries and allowances of chairman and members of the board.

2. The chairman of the board shall be appointed by the Lieutenant-Governor in Council, and shall be paid an annual salary not exceeding the sum of four hundred dollars per annum. The services of the other members of the board, except the secretary, shall be honorary, and they shall be paid no per diem allowance or compensation, but their travelling and other necessary expenses, while employed on the business of the board, shall be allowed and paid.

Duties of board.

3. The Provincial Board of Health shall take cognizance of the interests of health and life among the people of the Province. They shall especially study the vital statistics of the Province, and shall endeavour to make an intelligent and profitable use of the collected records of deaths and of sickness among the people; they shall make sanitary investigations and inquiries respecting causes of disease, and especially of epidemics; the causes of mortality and the effects of localities, employments, conditions, habits, and other circumstances upon the health of the people; they shall make such suggestions as to the prevention and introduction of contagious and infectious diseases as they shall deem most effective and proper, and as will prevent and limit as far as possible the rise and spread of disease; and they shall, when required or when they deem it best, advise officers of the Government and Local Boards of Health in regard to the public health and as to the means to be adopted to secure the same, and as to location, drainage, water supply, disposal of excreta, heating, and ventilation of any public institution or building.

Information to be published.

4. The board shall from time to time, and especially during the prevalence in any part of the Province of epidemic, endemic or contagious disease, make public distribution of such sanitary literature, and of special practical information relating to the prevention and spread of contagious and infectious diseases through the medium of the public press, and by circular to local boards of health and health officers, Municipal councils, and in and through the public schools and otherwise as shall be deemed by them in the interest of the public health.

Meetings of board.

5. The board shall meet quarterly at Toronto, and at such other places and times as they may deem expedient. Three members of the board shall be a quorum for the transaction of business, and they shall have power to make and adopt rules and by-laws regulating the transaction of its business, and may provide therein for the appointment of committees, to whom they may delegate authority and power for the work committed to them.

Investigation in special cases.

6. The members of the board may, with the approval of the Lieutenant-Governor in Council, send their secretary or any member or members of the board to any part of the Province when deemed necessary to investigate the cause or causes of any special contagious epidemic or endemic diseases, or of mortality; and such investigation may be taken upon oath or otherwise as to the said investigating committee or secretary may appear to be necessary, and in such case the secretary or any member of the board present at the investigation may administer the oath.

Appointment of secretary.

7. The Lieutenant-Governor in Council may appoint a competent and suitable person as secretary of the board, who shall hold office during pleasure, and who may be paid an annual salary not exceeding one thousand dollars per annum, and who shall be the chief health officer of the Province.

Duties of secretary.

8. The secretary shall keep his office at Toronto, and perform the duties prescribed by the Act or required by the board; he shall keep a record of the transactions of the board and shall, so far as practicable, communicate with other Provincial or State Boards of Health, and with the Local Boards of Health, and health officers within the Province, and with Municipal Councils and other public bodies, for the purpose of acquiring or disseminating information concerning the public health; and he shall also use such means as are practicable to induce Municipal Councils to appoint health officers or

Local Boards of Health within their Municipality. He shall also assist in preparing the annual report of the Registrar-General in relation to the vital statistics of the Province, and shall perform such other duties and functions relating to vital statistics and otherwise as may be assigned to him by the Lieutenant-Governor in Council.

Board to keep supply of vaccine matter.

9. The board shall keep at all times an adequate supply of vaccine matter for the purpose of supplying at cost price, or upon such other terms as the board may from time to time determine, every legally qualified medical practitioner with such reasonable quantities of the said matter as he from time to time requires.

Lieut.-Gov. may, by proclamation, declare board to have powers of Central Board of Health, under R.S.O., c. 190.

10. In the event of a proclamation being issued by the Lieutenant-Governor under the provisions of the ninth or tenth sections of the Act respecting the Public Health (Revised Statutes of Ontario, chapter one hundred and ninety), the Lieutenant-Governor may by proclamation declare the said Provincial Board of Health to have and possess all the powers, rights and authorities conferred upon or vested in the Central Board of Health by the said one hundred and ninetieth chapter of the Revised Statutes of Ontario, and such board shall in such case possess and may exercise in their own name all or any of such powers, rights and authorities in addition to any other powers by this Act conferred.

Following sections to be read as part of R.S.O., c. 190.

11. The following sections shall be read in connection with, and as part of, "An Act respecting the Public Health," (Revised Statutes of Ontario, chapter one hundred and ninety); and shall be and continue in force whether the proclamation provided for by the ninth section of said last-named Act shall be issued or not.

Municipalities may establish hospitals for small-pox patients, etc.

12. Every Municipality may establish or erect, and may also maintain, one or more hospitals for the reception of persons having the small-pox or other disease which may be dangerous to the public health; or any two or more Municipalities may join in establishing, erecting, or maintaining the same; but no such hospital shall be erected by one Municipality within the limits of another Municipality without first obtaining the consent of such other Municipality to the proposed erection.

Regulation of hospital, sick, etc.

13. When any hospital shall be so established, the physician attending the same, or the sick therein, the nurses, attendants, and all persons who shall approach or come within the limits of the same, and all such furniture and other articles as shall be used or brought there, shall be subject to such regulations as shall be made by the health officers or Local Boards of Health.

Local Boards of Health to establish hospitals in case of small-pox, etc., if municipality neglects same.

14. When the small-pox, or any other disease dangerous to the public health, shall break out in any Municipality, the health officers or Local Boards of Health, in case the Municipality shall not have provided the same, shall immediately provide such a temporary hospital, or place of reception for the sick and infected, as they shall judge best for their accommodation and the safety of the inhabitants, at the cost of the Municipality; and such hospital, or place of reception, shall be subject to the regulations of the health officers or Local Boards of Health, in the same manner as is hereinbefore provided for an established hospital.

Precautions to be taken to prevent infection.

15. When the small-pox, or any other disease dangerous to the public health, is found to exist in any Municipality, the health officers or Local Board of Health shall use all possible care to prevent the spreading of the infection or contagion, and to give public notice of infected places by such means as, in their judgment, shall be most effective for the common safety.

Isolation of persons having small-pox, etc.

16. The health officers of any Municipality, or the Local Board of Health, or any committee thereof, may isolate any person having the small-pox or other disease dangerous to the public health, and may cause to be posted up on or near the door of any house or dwelling in which such person is, a notice stating that such disease is within the said house or dwelling.

Isolation of persons infected or who have been exposed to infection.

17. When any person coming from abroad, or residing in any Municipality within the Province, shall be infected, or shall lately before have been infected with, or shall have been exposed to the small-pox or other disease dangerous to the public health, the health officers or Local Board of Health of the Municipality, where such persons may be, may make effective provision in the manner which to them shall seem best for the public safety, by removing such person to a separate house or by otherwise isolating him, if it can be done without danger to his health, and by providing nurses and other assistance and necessaries for him at his own cost and charge, or the cost of his parents or other person or persons liable for his support, if able to pay the same, otherwise at the cost and charge of the Municipality.

Notice to be given by householder in case of small-pox, etc.

18. Whenever any householder shall know that any person within his family has the small-pox or any other disease dangerous to the public health, he shall immediately give notice thereof to the Local Board of Health, or to the health officers of the Municipality in which he resides.

Notice to be given by physician.

19. Whenever any physician shall know that any person whom he is called upon to visit is infected with the small-pox or any other disease dangerous to the public health, such physician shall immediately give notice thereof to the Local Board of Health or health officers of the Municipality in which such diseased person may be.

Penalty for neglect to give notice.

20. Any person or persons, physician or physicians, to whom the two preceding sections shall apply, who shall refuse or neglect to give the notice by such section required to be given by him or them respectively, shall be subject to the penalties provided by the thirty-second section of "The Act respecting the Public Health," and the said thirty-second section and the subsequent sections of said Act shall apply to any prosecution and proceedings under the said preceding sections.

Payment of salaries and expenses.

21. The expenses of the said Provincial Board and the salaries of the chairman and secretary shall be paid out of such moneys as may, from time to time, be appropriated by the Legislature for that purpose.

Short title.

22. This Act may be cited as "The Public Health Act, 1882."

Article II.

CONDENSED ABSTRACT OF MINUTES OF THE MEETINGS OF THE PROVINCIAL BOARD OF HEALTH.

FIRST REGULAR MEETING.

Office Provincial Board of Health,
Toronto, May 9th, 1882.

The Chairman, Dr. Oldwright, called the meeting to order at 2.30 p.m., by reading the Commission of the Lieutenant-Governor in Council, appointing the following members of the Board: Dr. W. Oldright, M.A., Chairman; Dr. C. W. Covernton; Dr. J. Hall; Dr. J. J. Cassidy; Dr. F. Rae; Dr. H. P. Yeomans, B.A. All of these gentlemen, as well as the Secretary, appointed by a subsequent Order in Council, were present.

Business was begun by the President, reading his address, which, on subsequent motion of Dr. H. P. Yeomans, seconded by Dr. F. Rae, was ordered to be published.

A telegram was thereafter read from Dr. J. Coventry, Mayor of Windsor, asking the advice and aid of the Board towards taking measures for the repression of a small-pox outbreak in that town. Various communications were sent and received from the Mayor, and the Police Magistrate, Mr. Bartlett, concerning the epidemic, owing to the authority of the Local Board in some cases being questioned. The points insisted upon by the Board as urgently necessary, are found expressed in the following letter addressed finally to Dr. Coventry:

Toronto, May 10th, 1882.

Dear Sir,—The important point is this, that there shall be no intercommunication between persons outside going at large and any person or thing that has come in contact with the patient after the *eruption* has appeared, and this must necessitate that the patient and those in contact with him shall be kept to themselves either in their own house, whence there shall be no egress either of persons or things; or by being removed to a small-pox hospital. Further, all who have escaped from this quarantine before they have come under the observation of the Medical Health Officer, must be kept under the daily observation of that officer, and be at once *vaccinated* by a medical man, and *isolated* at once if any symptoms of the disease present themselves; or, if they have recently been in contact with the person who is sick with the *eruption*, they must at once be *isolated* for a few days. Everything that has been exposed to infection must be *fumigated*.

I have the honour to be,
Your obedient servant,

Peter H. Bryce,
Secretary.

The Report of the Commission appointed to visit the Michigan State Board of Health, and to attend the Sanitary Convention at Greenville, was next read by Dr. Cassidy, one of the Commissioners.

Thereafter the Report of the Commission, appointed to investigate an outbreak of Enteric (Typhoid) Fever at Sarnia, was read by Drs. Covernton and Yeomans, the two Commissioners (copy of the Report will be found in Appendix D). After the reception of the Report, it was discussed in Committee of the Whole, and its suggestions adopted on motion of Dr. Rae, seconded by Dr. Cassidy.

The Board then proceeded to appoint a Committee, consisting of Drs. Covernton, Cassidy and the mover, Dr. Rae, to draft and report to it a code of by-laws for its regulation and government. This Committee afterwards reported a code which was received and adopted.

The next item of business, occupying the attention of the Board, was a motion by Dr. Yeomans, seconded by Dr. Rae, and carried: that a circular be drafted and sent to the clerks of municipalities, requesting them to inform the Board whether their respective municipalities have complied with the powers conferred upon them by Cap. 174, section 466 and subsequent sections of the Revised Statutes of Ontario, giving them power to enact by-laws for the preservation of the public health, for the prevention of contagious diseases, etc.

Another circular letter was, on motion, decided to be sent to physicians, along with that to the clerks of municipalities, asking them to use their influence in urging municipal authorities to take action in matters relating to the public health.

It was further moved by Dr. Covernton, seconded by Dr. Cassidy, and carried, that a memorandum be prepared containing a digest of clauses of "the Municipal Institutions' Act" (R.S.O., cap. 174), and of "An Act respecting the Public Health" (R.S.O., Cap. 190), relating to the powers and duties of Local Boards of Health.

On motion of Dr. Rae, seconded by Dr. Yeomans, it was decided that a Committee, consisting of Drs. Covernton, Cassidy and the Chairman, be appointed to consider the best and most economical scheme for obtaining reports of the diseases most prevalent throughout the Province, and that it report at a subsequent meeting.

On motion, the Secretary was instructed to communicate with the health authorities of the Dominion of Canada, and of the several Provinces thereof, and of Municipal and Provincial Boards of Health, where they exist, asking their coöperation in the matter of the proposed "Immigrant Inspection Service."

Exchanges of sanitary literature were directed to be arranged for; and an anemometer and thermometer were ordered to be obtained by the Secretary for the use of the Committee on Ventilation in making experiments.

On motion of Dr. Cassidy, seconded by Dr. Yeomans, and carried, a Committee,

consisting of Drs. Covernton, Hall and the mover, was appointed to discuss measures for the establishment of a Home for Foundlings.

As is required by the Act, the Secretary, on motion, was directed to obtain a supply of vaccine matter, and to keep fresh supplies on hand as required. It was further moved that the Chairman and Secretary be appointed a Committee to enquire into the wisdom of establishing a vaccine farm for keeping permanently on hand a reliable supply of fresh vaccine.

After discussion in Committee of the whole, various Standing Committees were appointed, the following being the Committees:

1. On Epidemic, Endemic and Contagious Diseases, Dr. W. C. Covernton.
2. On Sewerage, Drainage and Water Supply, Dr. W. Oldright.
3. On Adulterations of Food, Drink, etc., Dr. J. Hall.
4. On Heating and Ventilation of Buildings, Dr. J. J. Cassidy.
5. On Vital Statistics and Climatology, Dr. W. C. Covernton.
6. On Poisons, Chemicals and Explosives, Dr. F. Rae.
7. On Schools and Education in Relation to Health, Dr. H. P. Yeomans.
8. On Legislation, Dr. F. Rae.
9. On Finance, Dr. J. Hall.

A motion was carried, moved by Dr. Covernton, seconded by Dr. Yeomans, that municipal authorities be recommended to adopt a by-law concerning the proper disposal of garbage, and the proper materials to be used as foundations for building houses upon.

Upon motion it was decided that a Committee consisting of the Chairman, Dr. Cassidy, and Dr. Rae, be appointed to ascertain whether arrangements could be made for holding a Sanitary Convention at St. Thomas, at such time as might be found convenient.

Before the adjournment of the last session of the first regular meeting, the Secretary was, by a resolution unanimously passed, directed to convey a letter with the following votes of thanks to various gentlemen. Copy of the letter:—

Vote of Thanks.

It was moved by Dr. Yeomans, seconded by Dr. Covernton, and carried: "That the members of the Provincial Board of Health of Ontario, before separating from their first regular meeting, desire to put on record their grateful sense of fraternal attentions paid to members of their body, who, at the request of the Provincial Secretary, visited Sarnia, by the physicians of that town; also to the members of the Council and inhabitants for their courteous reception and valuable assistance in the performance of the enquiry especially entrusted to them; also to Dr. H. B. Baker, Secretary of the State Board of Health, Michigan; to Mr. John K. Allen and Dr. Nicholson, Secretary's Department, and to the members and officials of the Board; to the officials of the Detroit Board of Health, to Dr. Jones, Dr. Redmour, and other members and ex-members of the Toledo Board of Health; to Drs. Stockwell and Northrup, Port Huron; and to the Mayor, Dr. Shelden, Dr. Avery, and other citizens of Greenville for the courtesy shown by them to members of this Board during their recent visit to their respective localities."

The meeting, on motion of Dr. Covernton, seconded by Dr. Yeomans, adjourned to meet again at the call of the Chairman.

WILLIAM OLDRIGHT,
Chairman.

P. H. BRYCE,
Secretary.

First Special Meeting of the Board.

TORONTO, June 6th, 1882.

The meeting was called to order by the Chairman requesting the Secretary to read the minutes of the last meeting. On motion, the minutes were confirmed. The follow-

ing members were present:—Dr. W. Oldright, Chairman; Dr. W. C. Covernton, Dr. J. J. Cassidy, Dr. F. Rae.

Various communications were read.

The Report of the Committee on Disease Reports was thereafter read, and the Board went into Committee of the whole on the Report.

After discussion, the Committee arose and reported progress, and on motion, the Report was received and adopted.

The following motion was then read by Dr. Covernton, seconded by Dr. Cassidy, and carried:—"That in the opinion of this Board it is desirable that a systematic sanitary supervision and inspection of Public Schools be established all over the Province of Ontario. That the Board trusts that the recommendation of so necessary a measure will meet with the approval of every Municipal Council, and that efficiently to carry it out a local health officer be appointed, whose duty in this connection should consist in preventing children who have been suffering from contagious diseases from attending school before the infectious period has passed; in visiting the houses of children absent from school, on account of illness; and in making strict enquiries into the general sanitary condition of the respective families. The mere exclusion of children from school on the occasion of infectious diseases existing in the family is not sufficient. If scarlet fever or any other infectious disease exist amongst ignorant or indigent families, and children from such families are simply excluded from school for a few weeks, when it is known that they have, or are likely to have, it incubating in their system, many opportunities for conveying contagion to school children will still exist. The children from the school may be found mingling with their playmates out of school hours. In order to close against contagion in the way opened by association or by infected clothing, the medical inspector should see that through competent persons contagion should be sought out and destroyed in the house in which it originated."

It was further moved by Dr. Cassidy, seconded by Dr. Covernton, and carried: "That this Board would express the opinion that the appointment of health officers by Municipal Councils should be confined to local medical men, who, from their professional training, are alone qualified to perform the work efficiently. The duties of health officers should include the work of the medical inspection of schools and the supervision of the necessary attention to disinfection in public and private buildings and to the supervision of the families of children suffering from contagious diseases."

After some remarks by Dr. Rae concerning the various measures proposed *re* the Immigrant Inspection Service, followed by some general discussion, the meeting adjourned.

WILLIAM OLDRIGHT,
Chairman.

P. H. BRYCE,
Secretary.

Second Special Meeting.

TORONTO, June 27th, 1882.

The minutes were read and confirmed. The following gentlemen were present:—Dr. W. Oldright, Chairman; Dr. F. Rae; Dr. J. J. Cassidy; Dr. J. Hall.

The Secretary thereafter read various communications, and gave a brief *resumé* of the work carried on by him since the previous meeting.

The Report of the Committee on Sewage and Drainage was read by Dr. Oldright, after which, it was received and adopted.

It was thereafter decided, on motion, that pamphlet No. 4 (How to check Contagious Diseases) be stereotyped as revised; and that municipalities and others be advised by advertisement that such may be obtained at cost from the parliamentary printer.

Dr. F. Rae's report on the Port Huron Convention, and its discussion on Immigrant Inspection, was read and received, and after discussion in Committee of the Whole, was adopted.

A motion made by Dr. J. Hall, and seconded by Dr. J. J. Cassidy, was carried,

to the effect, "That whereas it is the opinion of this Board that contagious diseases frequently originate on shipboard solely from impure air: that it is a matter of great moment for the prevention of such diseases that ships should be constructed with a view to thorough ventilation, that in no case should the hatches be closed without means being provided for the circulation of pure air, and that in the meantime the Government should insist on measures to secure such an end."

The question of the introduction of instruction in Hygiene into schools was introduced by the Chairman for discussion in concurrence with a resolution of the Ontario Medical Association. Its further discussion was postponed.

By motion of Dr. Cassidy, seconded by Dr. Hall and carried, the Chairman and Secretary of the Board were commissioned to proceed to Boston, New York, and Albany, for the purpose of obtaining all possible information concerning the working of the State and City Boards of Health in those places, as well as of making an examination of Vaccine Farms.

It was further resolved that the Board proceed to the selection of correspondents throughout the Province for reporting Diseases to the Board.

After various other items of business, amongst which was the approval of the sheet of "Directions for the Resuscitation of the Apparently Drowned," issued by the Committee on Accidents, the meeting adjourned.

WILLIAM OLDRIGHT, *Chairman.* P. H. BRYCE, *Secretary.*

SECOND REGULAR MEETING.

TORONTO, Sept. 5th, 1882.

The following gentlemen were present:—Dr. W. Oldright, Chairman; Dr. H. P. Yeomans, Dr. F. Rae, Dr. J. J. Cassidy.

The Minutes were first read and confirmed.

Various communications were read by the Secretary, and the action taken in each case stated.

The first business for consideration was the details of the proposed Sanitary Convention to be held at St. Thomas.

The next item of business was the reception of the Report of the Commission appointed to investigate the causes of Malaria prevalent in Cobocouk and Madoc. It was read in part and received; and on motion of Dr. Rae, seconded by Dr. Yeomans, it was decided to direct the Commission to extend their enquiries as to what action toward its removal the local authorties of these places may find feasible; and likewise to make any experiments in the matter of sawdust, etc., as being factors in the causation of Malaria, and to employ whatever special scientific services they may deem advisable in the pursuit of their investigations.

The methods of reporting to be adopted by the correspondents of the Board in the Disease Reports were discussed along with some minor matters, after which the meeting adjourned.

W. OLDRIGHT, *Chairman.* P. H. BRYCE, *Secretary.*

THIRD REGULAR MEETING.

First Session.

Toronto, Thursday, November 30th, 1883.

The Chairman called the meeting to order by requesting the Secretary to call the roll. The following members were present: Dr. W. Oldright, Chairman; Dr. W. C. Covernton, Toronto; Dr. J. J. Cassidy, Toronto; Prof. J. Galbraith, Toronto; Dr. F. Rae, Oshawa; Dr. H. P. Yeomans, Mount Forest. The minutes of the last meeting were then read and confirmed.

Communications on various subjects were read, the principal being from correspondents commending the work of the Board, in issuing such valuable disease reports.

The next order of business, the reading of reports of special committees, was then entered upon, Dr. Rae introducing the Report of the Committee on Legislation. On his motion, seconded by Dr. Covernton, the Board went into Committee of the Whole on the Report.

The discussion of legislation, tending to advance the work of the Board in dealing with questions of public health, was continued throughout the whole session, as well as most of the succeeding session.

Second Session.

Friday, December 1st, 2 p.m.

The Board met again at 2 p.m. on Friday, a Special Committee on Legislation having sat during the forenoon. The following members were present: Dr. Oldright, Chairman; Dr. Covernton, Dr. Cassidy, Dr. Rae, Dr. Yeomans, Prof. Galbraith.

The minutes having been read, the Board continued in Committee of the Whole the discussion of the Report on Legislation, at the end of which the committee rose, and on motion of Dr. Rae, seconded by Dr. Covernton, the Report was adopted.

Prof. Galbraith, having on motion been added to the Committee on Drainage and Water Supply, Dr. Oldright brought in the Report of the Committee on Sewage and Water Supply, which, after being read, was received and adopted.

The Secretary then read the Report of the Coboconk and Madoc Commission, which was received; discussion upon it being deferred till the next Session.

Third Session.

Friday, 8 p.m.

The roll having been called the following members were found present: Dr. Oldright, Chairman; Dr. Covernton, Dr. Cassidy, Dr. Yeomans.

A discussion in Committee of the Whole took place on the Report left over, and after rising from committee, the Board adopted the Report as amended. It was thereafter moved by Dr. Oldright, seconded by Dr. Cassidy, and carried: That a copy of this Report be transmitted to the Hon. the Provincial Secretary, with a letter drawing his attention to the recommendations therein contained.

Dr. Cassidy next read a partial Report of the Stratford Commission; the Report was received.

Dr. Covernton thereafter read a lengthy Report of the Commission appointed to collect Sanitary Information in Great Britain and in Europe. After its being read the Report was adopted on motion of Dr. Covernton, seconded by Dr. Yeomans.

Fourth Session.

Saturday, December 2nd, 10 a.m.

The meeting was called to order by the Chairman requesting the Secretary to call the roll, the following members being present: Dr. Oldright, Chairman; Dr. Covernton, Dr. Cassidy, Dr. Rae, Dr. Yeomans.

The Stratford Report was read as completed, and on motion of Dr. Cassidy, seconded by Dr. Rae, the received Report was adopted.

A general discussion in Committee of the Whole thereafter took place on the desirability of having instruction in Hygiene regularly imparted in schools, and of having some systematic action on the part of this Board taken for the preparation of a suitable work on the subject.

It was, upon motion, carried: That Drs. Cassidy and Yeomans be a Committee to wait upon the Minister of Education, to ascertain his views on the subject.

Thereafter the following motion was carried:—

Moved by Dr. Oldright, seconded by Dr. Rae: That the Committee on the Disposal of Sewage, etc., be authorized to issue a circular to Municipal Councils and Local Boards of Health, setting forth the evils of the privy-pit and cess-pool systems, and endeavouring to induce them to adopt such systems of disposal of sewage as shall be best adapted to the preservation of health, and the circumstances of their respective Municipalities, and explaining those various methods.

Before adjournment a discussion took place upon the necessity for urging greater stringency in the law respecting public funerals, and certificates of death.

The following motions were, upon motion, carried:—

Moved by Dr. Covernton, seconded by Dr. Cassidy; That the thanks of the Board be and are hereby tendered to the Right Honourable Dr. Lyon Playfair, Drs. Buchanan, Thorne Thorne, and Sedgwick Saunders; also, to J. Colmar, Esq., Canadian Government Office, and to the various Health Officers of a large number of cities and towns in Great Britain, for the great assistance they have rendered this Board in supplying them with their valuable Reports and copies of English Statutes relating to the preservation of public health.

And further, it was moved by Dr. Oldright, seconded by Dr. Yeomans: That the cordial thanks of this Board are due to the following gentlemen: Dr. S. H. Durgin, Chairman; Wm. Davis, Secretary; and Dr. Richardson, of the City Board of Health, Boston; Dr. Cutter and J. K. Hodgkins, Esq., of the Chelsea Vaccine Establishment; and Dr. Stattuck, Acting Secretary of the Massachusetts State Board of Health, for their kind and courteous attention to the Commission of this Board on a visit to the city of Boston; to Colonel Clarke, Secretary, to Drs. Day, Nagle and Taylor, and to Mr. Collins and other officials of the New York City Board of Health, for the obliging manner in which they lent their aid in giving information to the Commission of this Board, recently visiting the city of New York; and to Dr. E. Harris, Secretary of the New York State Board of Health, Albany, for his unremitting endeavours to supply your Committee with every information concerning the work of this Department, when recently they visited the city of Albany.

Fifth Session.

Saturday, 8 p.m.

The roll being called the following were found present: Dr. W. Oldright, Chairman; Dr. Covernton, Dr. Cassidy. The minutes of the previous Session having been read, the Secretary read the Report of the Lambton Mills Commission of Investigation into the recent outbreak of Typhoid there. On motion of Dr. Oldright, seconded by Dr. Cassidy, the Report was read and adopted.

Dr. Covernton's Report of the Geneva International Congress of Hygiene was thereafter presented, and on motion of Dr. Covernton, seconded by Dr. Cassidy, the Report was received and adopted.

The two following motions of Dr. Cassidy, seconded by Dr. Covernton, were then read and carried:—

Moved by Dr. Cassidy, seconded by Dr. Covernton: "Whereas Typhoid fever and Scarlet fever have been clearly traced, both in Europe and America, to the adulteration of the milk with water contaminated with sewage, and in other instances to the washing of the milk-cans with water similarly affected, as well as by direct absorption from the air of germs by the milk; and, whereas other diseases, such as milk sickness and ulcerative stomatitis, have been traced to the use of milk from cows infected either

with milk sickness or foot and mouth disease, this Board would recommend to Local Boards of Health that a proper inspection of dairies be made in order to prevent the occurrence or continuance of such evils." "That, whereas, several dangerous diseases, anthrax, trichiniasis, etc., may arise from eating the flesh of diseased animals; and, whereas, the stock brought to our large centres are often, from a long detention *in transitu*, entirely unfit to be slaughtered immediately upon their arrival; and, whereas, slaughter houses are often kept in such a way as to impair the health of persons residing near them, it is, in the opinion of this Board, desirable that licensed slaughter houses be established in the vicinity of our cities and towns, and that both they and the animals to be slaughtered be subject to the inspection of the Local Boards of Health and their executive officers."

It was thereafter decided that the President's address at the inaugural meeting of the Board, the various reports presented to the Board, the various papers read before the recent Sanitary Convention at St. Thomas, and two lectures on health subjects recently delivered by the Secretary, under the auspices of the Mechanics' Institute of Galt and the Brant County Teachers' Association, be incorporated in the Secretary's Annual Report.

Thereafter the Board adjourned.

W. Oldright,
Chairman.

P. H. Bryce,
Secretary.

APPENDIX B.

Article I.

REPORT OF THE COMMISSION APPOINTED TO OBTAIN SANITARY INFORMATION IN GREAT BRITAIN.

To the Chairman and Members of the Provincial Board of Health.

Gentlemen,—I have the honour to report the experience acquired of sanitary laws in operation in Great Britain, as also of the advanced knowledge of Hygiene displayed by the very numerous delegates from all parts of Europe, assembled at the Fourth International Congress of Hygiene, convened at Geneva, on the 4th of September; the session continued until the afternoon of the 9th.

I would *in limine* remark that the position of representative of the Provincial Board of Health, when first spoken of by you, was one that I at first hesitated to assume, as I could not as a sanitarian of but few years' standing presume to be anything but a student before the Gamaliels in the science, that I should find, especially in Great Britain, where Hygiene has been so long diligently studied, and so advantageously practised. I felt on consideration, however, that as I had previously arranged for a visit to England of some little duration, that if you gentlemen considered that I could be of use to the first Provincial Board established in the Dominion of Canada, it was my duty as one of its members to assist, to the best of my ability, the furtherance of the great work of Preventive-Medicine, so judiciously inaugurated by the existing Government.

The performance of the duties assigned was greatly facilitated by introductions kindly furnished me by Sir Alexander Galt to the Right Honourable Dr. Lyon Playfair, Deputy Chairman of the House of Commons; also, to J. Colmar, Esq., Sir A. Galt's deputy in the office of the Canadian Government, at Westminster; and on my arrival in London by a personal introduction from my friend Sir Sidney Waterloo, Member of Parliament for Gravesend, to Dr. Sedgwick Saunders, Medical Officer of Health for the City of London. Through these gentlemen I was favoured with invitations to Drs. Buchanan, Thorne Thorne, and other prominent officers of health, whose spacious and convenient offices are to be found in the palatial new buildings at Whitehall.

Through the kind intervention of these gentlemen I have succeeded in obtaining a large number of English Acts of Parliament on sanitary enforcements, also of literature bearing on the subject. I further obtained from them the names of the health officers of the cities and towns in Great Britain, to whom shortly after my arrival I forwarded copies of the proceedings of our Board since its first meeting and requested them in return to oblige me with their by-laws. In a very great number of instances this solicitation was most courteously and promptly answered, and the large number of reports that I have obtained from the very able officers of health in the various sanitary districts of London, Liverpool, Leeds, Sheffield, Bradford and other cities, cannot, I think, fail to be of great assistance to us in the performance of the arduous and responsible work we are engaged in.

I was prevented by the occupation I had in hand from attending the Sanitary section of the Fiftieth Annual Meeting of the British Medical Association held in the city of Worcester; but, through the kindness of my friend, Dr. Graham, of Toronto, who visited me early in August, a few days before the time fixed, I was enabled to send by him a copy of our Provincial Act relating to Public Health, as also copies of pamphlets circulated generally throughout our Province, and of other work done by the Board, to the Chairman of the Section of Hygiene, Dr. Alfred Carpenter, requesting at the same time for the Ontario Board the favour of any contributions in the science, in which we were co-workers, he might deem useful. To this solicitation Dr. Carpenter sent a message to me by Dr. Graham that he would be most happy to comply. Dr. Carpenter, in his address at the opening of the Section of Public Medicine or Hygiene, reviewed the sanitary work which had been directly performed by the Association since its establishment at Worcester, 1832, where the new campaign for the prevention of disease began, and was made the object of higher significance than the cure.

A large portion of the rapid growth of the Association he attributed to its founder, Sir Charles Hastings, having intimately associated with it inquiries into the causation and prevention of disease, and the application of the principles which regulate the health of the general public. Dr. Ransome, of Owen's College, Manchester, in his address at this meeting, made some remarks so pertinent to the endeavours our Board are making for the procuring of weekly returns of disease from the medical men of the Province, that I cannot refrain from quoting them. These returns, he states, were also utilized by several observers of the influence of atmospheric changes upon disease. They were continued for twenty years, and, in addition to being put to the above purpose, they were found to be of great service in giving timely information of the presence and course of epidemics. They now form a body of medical statistics out of which have have been drawn many conclusions respecting the laws of epidemics, their periodic appearances and their causes, and the relations to them of other diseases.

I found on my arrival in England that there was a great dissatisfaction existing in the minds of a large body of practitioners, relative to the Bill now before the House of Commons requiring compulsory notification, by the medical attendant, of infectious diseases. (Copy of proposed Bill to be found in the Birmingham report, page 35.) The arguments employed against this measure may be briefly summarized: That it would be a breach of professional confidence; that the exercise of the powers contemplated in this Bill would lead to the concealment of disease; that dreading the notification which must follow if a medical man were called in, and which might lead to the patients being forcibly removed from their homes to isolated Hospitals, that medical aid would not be summoned, and as a necessary consequence there would be a default of the skilled disinfectant precautions that a medical man would invariably order to be carried out, and thus the infection would be extensively spread; further, that it would degrade the members of a noble profession by forcing on them the position of spies and informers. With such conflicting opinions regarding the best methods to be employed for the checking of epidemic diseases, it may be well to set forth a few facts derived from a return of communications received by the Local Government Board and Home Office, from the local authorities of the several cities and towns in England and Scotland, in which local Acts and By-laws are in force, containing provisions which require the noti-

fication of infectious diseases. I would here state that the compulsory clauses in the proposed new Act, which have given rise to such a tumult of opinion, are practically those embodied if not exactly in the letter, certainly in the spirit of local Acts and By-laws, which for a long time have been in successful operation in England and Scotland. In Greenock this notification clause was introduced in 1876, and Dr. Wallace in his report shews that whereas in the three quinquennial periods before 1876, the death rate varied from 29 to 33.6 per thousand; in the five years, 1876 to 1880, the mortality was only 23.3, and the rate for 1881 was 22. In the five years preceding the introduction of the measure, the annual average of deaths from small-pox was 55, from measles, 50; scarlet fever, 93; typhus, 29; and from enteric fever, 36. But in the following five years, these annual averages were reduced respectively to 28, 13, 28, 12, and 19. Before 1876 Greenock held the unenviable position of pre-eminence among other Scotch towns in the death rate from zymotic diseases. The annual percentage of deaths from these diseases to the total deaths was in that town 27, which rate was only equalled by Dundee; the other towns from Perth to Glasgow varying in their percentages from 21.6 to 25.9; but in the five years 1877 to 1881, the average of Greenock took the lowest place, and was slightly under 14 per cent. In the case of scarlet fever the reduction in the mortality after notification was from an average of something over 5 to an average of less than 1.

In England and Wales these local Acts for compulsory notification have been in operation from periods of time that I now designate; Barrow-in-Furness, 1881; Birkenhead, 1881; Blackburn, 1871; Blackpool, 1879; Bolton, 1877; Bradford, 1881; Burton-on-Trent, 1878; Derby, 1879; Huddersfield, 1880; Jarrow, 1878; Lancaster, 1880; Leicester, 1879; Llandudno, 1879; Manchester, 1881; Norwich, 1879; Nottingham, 1878; Oldham, 1880; Preston, 1880; Reading, 1881; Rotheram, 1879; Stafford, 1880; Staleybridge, 1881. I now append a few communications addressed by the local authorities to the Government Board at Whitehall, giving the results of their experiences. The town clerk of Barrow writes that the compulsory notification of infectious disease by the medical practitioners of the locality, has acted beneficially in regard to the health of the town; two cases of small-pox have been quickly isolated, and the disease did not spead. The local authorities believe that the spread of scarlet and typhoid fevers have been prevented by the Act. The town clerk adds that prior to the Local Act coming in force, the medical practitioners were very reluctant to give any information on the subject of diseases, on the ground that patients generally objected to such cases being made known, and that these same practitioners sought to obtain modifications of the Bill before it became law, but without effect. So satisfied, however, are the local authorities of Barrow as to the great advantages resulting from the Act, that they suggest that the medical men in the surrounding districts should be compelled to give similar information in order to avoid outbreaks, which are often caused by cases imported into Barrow. The town clerk of Blackburn writes to the effect that the immediate notification of infectious disease was the means of preventing the spread of small-pox in the borough when it broke out in April of last year. The town clerk of Blackpool writes: "I think it is the unanimous feeling of the town council that the powers obtained by the Act are most valuable. Personally, I am strongly of opinion that the medical attendant is the proper person to notify the existence of infectious disease to the Medical Officer of Health, and that if it were left to the householder there would be in many cases great difficulty in obtaining the certificate. The town clerk of Bolton reports that since the amended provisions have become law they have been fully carried out, and the corporation has had occasion to institute only one prosecution, the case being that of a medical practitioner who failed to report a dangerous case of small-pox, and was thereupon fined ten pounds. The town clerk of Burton reports that the provisions have been in force for three years, and have proved satisfactory. The town clerk of Derby reports to the same effect. The clerk of the Llandudno commissioners writes: The commissioners are satisfied with the working of the provisions obtained by the Llandudno Improvement Act, so far as these powers apply. The town being a fashionable watering-place, frequented by thousands of visitors during the season, it is of the greatest importance that in this and in similar places, cases of

infectious diseases should be isolated promptly. As the law stands three things have to be obtained, viz: (1st) a medical man's certificate, (2nd) consent of the hospital authorities, (3rd) a Justice's order. To accomplish these time is lost, and publicity given, which necessarily causes alarm. I would take the liberty of suggesting that some simpler method be adopted; for example, if in the opinion of the Medical Officer of Health and the family medical attendant, a case occurs where proper isolation cannot otherwise be obtained, that their certificate of removal be sufficient to accomplish that object. The Medical Officer of Health of Manchester reports: In reply to your letter, dated 3rd April, 1882, respecting the working of the Act for the compulsory notification of infectious disease in Manchester, I beg to inform you that I am perfectly satisfied with it so far. The medical practitioners as a rule have readily complied with the requirements of the Act, and many of them have taken considerable trouble to furnish me with information respecting cases which they have been called upon to attend. Similar testimonials have been received by the Local Government Board from Bradford, Lancaster, Leicester, Norwich, Oldham, Preston, Reading, Rotheram, Stratford, Staleybridge and Warrington.

The following is the form of certificate which, in most of the above cases, the medical man is required to fill up and transmit to the sanitary authorities:—

"Pursuant to the abovementioned Act, I hereby certify and declare that, in my opinion, the undermentioned person is suffering from

Dated the day of 18 .

Name of person suffering from disease,

Situation of the house where such person is,

Name of occupier or other person having the control or charge of the building or room,

(Signed) ,

of ."

This certificate must, under a penalty in case of neglect, be forthwith sent by post or otherwise to the Corporation at the Town Hall, addressed to the Medical Officer of Health, and marked outside "Immediate."

I will now turn to the Public Health Acts, 38th and 39th Vic., Cap. 55, dealing with infectious diseases. By clause 120 and following clauses to 143 included, local authorities are empowered to cause infected premises to be cleansed and disinfected; to destroy or disinfect infected bedding, clothing or other articles; to make provision for the conveyance of infected persons to hospitals or to other places of destination; to obtain magisterial orders for the removal of infected persons, without proper lodgings, to hospitals appointed for the reception of infectious cases; to apply the same provision to shops as to houses; to proceed against persons charged with the exposure of infected persons or things, or letting houses in which persons have been lodging; to provide hospitals and medical attendance for infected persons; to take measures for the stamping out of epidemic diseases; to provide mortuaries. All these various powers may be enforced by penalties varying from a shilling up to five pounds. It would appear that it is open to doubt whether the Act gives power to local authorities to enter on private premises where the infected persons or things are supposed to be lying, as the town clerk of Warrington, where, as I have previously stated, the Public Health Act is strengthened by a local Act containing the provisions recommended by the select committee, writes as follows to the Secretary of the Local Government Board: "I wish particularly to draw your attention to the fact that there is no existing enactment; nor does the present Bill for the better notification of infectious diseases contain any provision, giving a power of entry in private premises to the Medical Officer of Health; without such provisions the Act would be practically valueless. I may, however, add that in this borough the Medical Officer has always demanded and obtained inspection, excepting in one case, where entrance was refused; and I advised—and, I believe, correctly—that an entry could not be forcibly effected."

I believe I have mentioned that in Great Britain the corporations pay to every registered practitioner for each certificate of infectious disease the sum of half-a-crown in respect of cases in private practice, and one shilling in respect of cases occurring in practice as medical officer to any public body or institution. It might not, perhaps, be deemed out of place for me to record in this report a few of the provisions for dealing with infectious diseases, ordered by the Public Health Act:

1st. Whenever it shall be certified to the Corporation by the Medical Officer of Health or other legally qualified medical practitioner, that the spread of infectious disease is, in the opinion of such Medical Officer of Health or medical practitioner, attributable to the milk supplied by any cow-keeper, purveyor of milk or occupier of a dairy milk store or milk shop, the Corporation may require such individual to furnish to them within a time to be fixed by them, a full and complete list of the names and addresses of all his customers within the Borough, and such cow-keeper or supplier of milk shall furnish such list accordingly after the rate of for every twenty-five names; but no such payment shall exceed ; and each person who shall wilfully or knowingly offend against this enactment shall for every such offense be liable to a penalty not exceeding five pounds, and to a daily penalty not exceeding five shillings.

I would here call the attention of the Board to the very admirable provisions which the Metropolitan Board of Works consider necessary to be made in all dairies and cow-sheds in the metropolis, for lighting, ventilating, air space, cleansing, drainage and water supply, in compliance with Sections 5 and 6 of "The Dairies, Cow-sheds and Milk Shops Order of July, 1879." See Twenty-fourth Annual Report of Parish of St. Mary, Newington; also reports furnished from the town of Sheffield.

By the careful observance of similar precautions we may guard cities and towns in Canada from epidemics of Typhoid, similar to those that a few years ago prevailed in Marylebone and Islington. In the first instance it was discovered that the milk-cans, before being filled and sent off were washed out with sewage contaminated water, and filth fever was thus distributed far and wide among the inhabitants. In the second instance—that of Islington—polluted water was used to adulterate the milk, and thus scatter broadcast dirt fever. But to return from this digression to the 2nd Provision of the Act:

2nd. When the Corporation are of the opinion, on the certificate of their Medical Officer of Health or of any other legally qualified medical practitioner, that the cleansing and disinfecting of any house or part thereof and of any article therein likely to communicate any infectious disease, or to retain infection would tend to prevent or check infectious diseases, and that such cleansing and disinfection would more effectually be carried out by the Corporation than by the owner or occupier thereof, the Corporation, without requiring such owner or occupier to carry out such cleansing and disinfection as aforesaid, may, if they think fit, but at their own cost, themselves cleanse and disinfect such houses or parts thereof, and articles, and may for that purpose remove any such articles, and shall make compensation to such owners or occupiers for all property or articles destroyed or injured by the exercise of the Provisions of this Section. And any person who shall obstruct any duly authorized officer of the Corporation in carrying out these Provisions, shall be liable to a penalty not exceeding five pounds.

3rd. Every person who shall cease to occupy any house, room, or part of a house, in which any person has within six weeks previously been suffering from any infectious disease, without having such house, room, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of a legally qualified medical practitioner, as testified by a certificate given by him, or without first giving to the owner of such house, room, or part of a house, notice of the previous existence of such disease; and every person ceasing to occupy any house, room, or part of a house, and who on being questioned by the owner thereof, or by any person negotiating for the hire of such house, room, or part of a house, as to the fact of there having been within six weeks previously any person therein suffering from any infectious disease, knowingly makes a false answer to such questions, shall be liable to a penalty not exceeding twenty pounds.

4th. Provision has reference to the period the body of a person dead from infectious disease should remain unburied elsewhere than in a mortuary.

5th. Ordains that in cases of death from infectious disease in any hospital or place of temporary accommodation, the body shall only be removed from such places for the purpose of instant burial.

6th. Relates to penalties to be inflicted on persons who hire or use other than a hearse or public conveyance for the removal of persons dead from infectious diseases, without notifying the owner or driver of the conveyance—other than a hearse—which has been used for the conveyance of the bodies of persons who have so died, and who shall not immediately afterwards adequately provide for the disinfection of such conveyances.

7th. Corporations shall from time to time provide temporary shelter or house accommodation for the members of any family in which any infectious disease has appeared, and who have been compelled to leave their dwellings for the purpose of enabling such dwellings to be disinfected, and shall further provide or contract with any person or persons to provide nurses for attendance on individuals suffering from infectious disease within the Borough, and shall be enabled to charge a reasonable sum for the service of any nurse provided by them.

Sufficient testimony that the opposition to compulsory notification of infectious diseases is very far from universal in Great Britain has been then in the foregoing pages, I think you will judge, sufficiently demonstrated; also, that the most careful and judicious precautions against the spread of contagious diseases have for a long time been observed; for the subservience of this end I would remark on the admirably fitted-up isolation hospitals, an elaborate report on which has been recently issued by Dr. Thorne Thorne, from whom I have received for this Board a copy—a careful perusal of which will convince all that all that money and advanced expert knowledge could accomplish, have in many of the various structures described and illustrated in the report, been most successfully accomplished.

If the name of "isolation hospitals" was exchanged for Sanatoria, it appears to me that a great deal of the prejudice against removal from home of parents, children and other inmates of households would be soon diminished, and before many years cease to exist. There is always more or less associated with the name of hospital, the latent, if not the expressed idea of pauperism; but once let it be generally known that at these Sanatoria, while the comfort, well-being, and medical care of the poor would be most assiduously looked to, there would under the same roof be found accommodations of a nature that even the most fastidious and exacting could take no exception to the disfavour in which by many they are held, would quickly vanish. Of the very superior advantages and diminished death rate in the treatment of these diseases at these isolation hospitals in lieu of their residences, from numerous statistics, I will confine myself to figures to be found in the Fourth Annual Report of the Borough of Derby:—

Total number of cases of scarlet fever from June 1st to October 7th, 1880	81
Removed from their homes	30
Not removed	51*
Total number of houses from which the patients were removed	22
Not removed	45

Of the 30 cases removed and treated at hospital, number of deaths, 1, or 3.3 per cent.; of the 51 cases not removed, number of deaths, 8, or 15.6 per cent.; of the 22 houses from which the cases were removed, there was a spread in 2 of them, or 9 per cent.; of the 45 houses from which the cases were not removed there was a spread of 11, or 26.6 per cent.

Under the 131st Section of the Public Health Act, 1875, of Great Britain, every sanitary authority, whether urban or rural, has the power to provide for the use of the inhabitants of their district, hospitals or temporary places for the reception of infectious

* Five of which were doubtful.

cases of sickness; and almost universally, whenever an outbreak of contagion occurs, these powers are acted on. In Canada similar powers are conferred by Provincial and Dominion Acts. Let us hope that with such evidences of control as I have just quoted the authorities will not prove slow in availing themselves when necessary of the existing Acts. In Canada from the middle of April to the middle of October, hospital tents with ventilation in the canvas roof, and a boarded floor two or three feet from the ground, would be, in the instances of inability to provide permanent structures, well suited for any exigency.

In order to prevent the extension of infectious diseases, separation should early be established. Any interval allows the cases to multiply and ultimately to become so numerous that attempts at isolation cannot succeed. Prompt isolation on the occasion of cases of small-pox occurring last spring at Windsor, saved the inhabitants from a probably widespread epidemic of the disease, by which numbers of lives might have been sacrificed, and also saved the merchants and shop-keepers from the losses that would have accrued by the interception of all traffic with the neighbouring city of Detroit. We cannot, however, expect in Canada an immediate awakening to the paramount importance of such provisions by sanitary authorities and municipalities, when we find by Dr. Thorne's report that such provision had been made by only 296 out of the 1593 sanitary authorities in England and Wales, and that many of these were not in all particulars equal to the necessity. Dr. Thorne's report is principally occupied with details of sixty-seven of the larger ones visited; those of Cheltenham and Bradford being on the largest scale. In both instances munificent donations and bequests, as also private subscriptions, had been forthcoming, and therefore they were found in every particular to be equal for the wants they were intended to serve. Dr. Thorne urges the erection of such buildings on sites easily accessible to relatives and friends, so that without trouble or loss of time enquiries may be frequently made as to the patients' welfare. He states that almost every degree of success and failure in securing complete isolation has been met with, but that no hospital adapted to and kept in readiness for the sick was found which had not done some good in preventing the spread of the infection.

It was quite evident from this and other exhaustive reports from local sanitary authorities that I procured whilst in England, that very many things are essential for the complete success of sanitoria or isolation hospitals, which no Acts of Parliament nor local regulations can supply. Not only must the sanitary authorities and health officers perform their several duties, but it must be done in a very gentle and considerate spirit, or the public will withhold that support in the absence of which all compulsory clauses will prove of little avail. The only aim of sanitary authorities is clearly to lessen or remove causes of disease; and in the performance of the duties required by these authorities, the officers elected must have due regard and sympathy for individual affliction. With this invariably shown, the public will not be slow in recognizing the advantages to be derived from isolation, not only by the patient, but also by the other members of the family and the surrounding neighbourhood.

Before quitting the subject of contagious diseases, there is one recently issued report that I have brought with me upon which I will not venture to offer any opinions of my own, as the subject is many sided, and has not very long ago been discussed in the public prints in Canada as exhaustively as its nature would permit in the lay journals. I refer to the Report of the Select Committee of the House of Commons upon the administration, operation, and effect, of the Contagious Diseases Act. The summary taken from the London *Lancet*, August 19th, extended the enquiry over a period of three years. The subject was divided into two branches by the Committee; first, the hygienic effects of the Acts; and secondly, the constitutional, moral and social aspects of their principles and administrations. Under the first head an analysis is given of statistics obtained from the army returns, comparison of results as to disease at the military stations subjected to the Acts, and those unsubjected. The conclusion at which the Committee arrived, as regards the effects of the Acts on the efficiency of the army, is that out of 16.69 per 1000 who would have been withdrawn from the efficient strength of the army in the subjected districts if they had not been under the Acts, 5.38 per 1000 have been *daily*

saved to the efficient strength of the force by the operation of the Acts. To this might be added the gain to the service derived from the increased immunity of the men from the various debilitating and incapacitating disorders which, though not classed as venereal diseases, not unfrequently result therefrom. They conclude by saying that the extent to which the Acts have diminished primary and constitutional syphilis, in the subjected districts appears of itself to your Committee to establish the hygienic utility of the Acts. Under the second head the conclusions arrived at were that the objections were not sustained by the evidence adduced in support of them. One of these appeared so serious that, if it could be proved, it would be fatal to the maintenance of the Acts, "that virtuous women may be, and are brought under their operation." They therefore spared no labour in probing it to the uttermost, with the result that the charges of misconduct brought against the police have broken down—that they are not chargeable with any abuse of their authority, and that they discharged their duties with moderation and caution; that the Acts had been especially useful in diminishing juvenile prostitution, and by the promotion of public order and decency in the subjected districts. After this protracted and careful enquiry they could not recommend the repeal of the Acts; that their repeal would mean the letting loose of increased crowds of abandoned women and girls of all ages upon the streets and thoroughfares swarming with soldiers and sailors, with little or no practical check over their behaviour. They recommend that in some of the unsubjected districts female lock-hospitals should be established; additional powers to be given to the police to enter houses of ill-fame for the purpose of taking steps to diminish prostitution, and also powers to institute proceedings for the prosecution of brothel-keepers, and that police magistrates should have power to grant a search warrant in cases where they have good reason to believe that girls under sixteen are to be found, and to commit for trial any person committing the offence of harbouring them. The Committee do not recommend the extension of the Acts to the United Kingdom generally, apparently from a deference to public opinion; but if the public had the knowledge possessed by the profession of the slow and silent progress of disorganization of internal organs, how lues is the remote cause of disease of brain, of heart, arteries, liver and kidneys; how the sins of the fathers are visited on the children; how many premature and still births, deformities and permanent weakness of constitution; how much tuberculosis and scrofula result, there would surely be a diminished number of people to be found, who deem it almost impious to arrest by legislation its spread.

In the valuable reports that I have brought from the Medical Officers of Health of numerous cities and towns in Great Britain, you will find a general consensus of opinion on the subject of the contagium of Typhoid being developed only from the excreta of patients affected with that disease, and where, either from carelessness or want of knowledge on the part of the attendants, the said excreta were not received in a bed-pan containing either carbolic acid, solution of chloride of zinc or some other disinfectant, and allowed to remain some hours immersed in the same, before being deposited either in latrine or water-closet, and that the soiled sheets, body linen, and coverlets had not been within a short time removed from the bed and immersed in a solution of some one of the disinfectants mentioned. That the contagium is a visible organism, harmless at the time it is excreted, but in a short time, by fermentation or otherwise, multiplying and acquiring a virulent vitality, is everywhere admitted. Where then, from neglect of proper precautions, this vitality has been developed, the germ finds its way into the sewers, drinking water, or milk, and is swallowed or inhaled by a person in whom there is present at the time a receptivity for disease, and enteric fever is developed.

There will be found in Sir John Rose Cormack's paper on the location of special and general hospitals in which contagious diseases are received, the expression of opinions respecting the agency of the winds in wafting pestilence to a considerable distance, in support of which he instances an outbreak of small-pox in the early months of 1879 in a building in the Route de la Revotte, Neuilly, then used as the temporary Hertford British Hospital. Two inmates of distant wards of this hospital, who had never seen any of the cases, had never come in contact with the fomites, or entered the ward in which they were treated, took the disease—one case ending fatally in six days, the other terminating

in recovery. The medium of reception Sir John considers to have been the air. Several times a day they had to pass along a corridor which was cut off from the length of the ward by a partition extending only two-thirds of the height from the floor. Large windows opened from without, directly into this corridor; they were exactly opposite other large windows within the ward, that is to say, at its other end. When these opposite windows were open—which they generally were, more or less—a considerable current of air swept into the corridor from the ward. The two patients mentioned passed through this corridor daily, and in their passage Sir John considers they must have inhaled and swallowed poison-charged epithelial scales, blowing through the ward on their faces. Sir John considers this explanation confirmed by cases in an epidemic of small-pox in Paris related by Trousseau. The case of an extensive spread of an epidemic over Paris of small-pox from an *annexe* of the Hotel Dieu is also brought forward in support of this view; and if on investigation it was found that it was generally entertained by sanitary officers, it would become a question of paramount importance to determine how far isolated hospitals reserved for small-pox cases should be distant from centres of population. Such a concurrence of opinion, however, is far from universal.

I quote first from a speech delivered last year by Dr. Fowler, at a meeting of City of London Union Guardians, in evidence, that small-pox and fever hospitals do not affect the neighbourhoods by radiation. Bartram Lodge is the house nearest to the present Hampstead Hospital, and is used as an orphanage under the superintendance of French Catholic Sisters. There are usually about fifty or sixty young girls in the orphanage, besides many other persons. The distance of the house itself is 107 feet from the nearest hospital pavilion. Now, since the present temporary hospital was opened, 7,352 cases of small-pox and 218 cases of relapsing fever were treated in the various pavilions, but up to the time Dr. Fowler addressed the guardians not a single case of small-pox or relapsing fever occurred in the orphanage. A month afterwards, however, in a footnote to the published speech, Dr. Fowler records two cases. Dr. A. Collie, in a paper published in the transactions of the Society of Medical Officers of Health, entitled, "Some Public Health points in the Management of a Small-Pox Hospital," recommends that a small-pox hospital should be located in places where patients are most likely to be found, that is, in densely crowded parts of large cities, preferring small hospitals to meet the need of local outbreaks, to large hospitals at a distance from the homes of the sick. It should be surrounded by a high wall, at a sufficient distance from inhabited dwellings—the distance open to question. The evidence to decide the point is not so extensive as might be desired; but one existing fact seems to decide the point. The Infirmary of the City of London Union, at Homerton, stands at a distance of ninety-nine feet from the westmost block of the Homerton Fever Hospital, and in this block on two occasions for a period of four months each, there were forty small-pox beds constantly occupied. The windows directly face each other, and are almost always open. Here then are apparently the conditions for the passage of small-pox poison, if it be true that it may be carried at long distances through the air. Amongst a number of persons consisting of children, new born infants and young women in confinement, there were likely to have been some susceptible subjects. The poison was there, and not only in the blocks referred to, but with certain winds it would be likely to be blown from three similar blocks, which are parallel to it. Thus air liable to contamination by about 250 small-pox patients, might on two different occasions for a period of about four months, have passed into rooms inhabited by persons, some of whom were probably susceptible to its influence; and yet on neither of these occasions did a single case of small-pox arise in the Union Infirmary; and although scarlet fever has been treated in the same block for nine years, with the small-pox exceptions referred to, no single case of scarlet fever has arisen in the lying-in wards of the infirmary, or in the children's dormitories. It is on this account that I have come to the conclusion that 100 feet would be a safe distance."

These extracts from Drs. Fowler and Collie would certainly appear to be in direct antagonism to Sir John Rose Cormack's views, as also of the confirmatory views of other experts recently engaged in the investigation of this somewhat obscure question,

and the idea that the material of infection must needs be destroyed by dilution is yet apparently open to question.

Dr. Thorne in his valuable Report, page 42, says: "At the beginning of the present year, statements were made on authority that claimed to be regarded, that occurrences of small-pox in certain parts of London were related to the presence there of the hospitals of the Metropolitan Asylums Board. Under these circumstances the Local Government Board was desirous of getting exact information as to the facts, and desired that medical enquiry into the alleged occurrences should be extended to London. Accordingly Mr. Power was associated in my enquiry for the purpose of investigating with all possible minuteness, such evidence as might be forthcoming from the experience of one of those institutions. The hospital to which Mr. Power's enquiry was directed was that of Fulham, and his report not only confirms the suspicion to which the experiences of Maidstone and Stockton had given rise, but suggests a faculty of extension, under certain circumstances of small-pox to surrounding houses that had not before been recognized."

I would here remark that the minuteness of Mr. Power's investigations, as shown in his report, into everything concerning hospital management in every particular—even to the whereabouts of every person attached to the hospital during every hour of the day, the outgoings of the resident staff and of the non-resident members—were those of a skilled detective, and the results of this minute investigation are the following:—

1. There has been in each epidemic period an excessive incidence of small-pox in houses in the neighbourhood of the hospital, as compared with more distant residences in Chelsea, Fulham and Kensington.

2. The percentage of houses invaded in the neighbourhood of the hospital has become gradually smaller as the distance of the houses from the hospital has increased.

3. Houses on chief lines of intercourse have not suffered more than houses lying in other directions.

4. In point of time there has been a marked relation between the varying use of the hospital, and manifestations of excessive small-pox in the neighbourhood. This was not shown when the hospital was used only for convalescents.

5. Appearance of excessive small-pox in houses around the hospital has never been delayed, until the hospital has become full or nearly full. It has always been most remarkable at the time when admissions to the hospital were beginning to increase rapidly.

6. On comparison of different epidemics, an almost constant ratio is observed between the amount of the hospital operations and degree of excess of small-pox in the neighbourhood.

Here follows an account of administrative circumstances, and the insufficiency of these to account for observed results, page 324:—

7. The machinery of the hospital administration, with inclusion of defects in machinery, does not account for the peculiarity of small-pox incidence within the three parishes of Chelsea, Fulham and Kensington since the establishment of the hospital.

8. That there must have been some condition or conditions operating to produce the observed distribution of small-pox around the hospital that have pertained to the hospital as such, and that have been in excess of the condition of small-pox extension as usually recognized.

Dr. Powers here passes in review the influences of ambulances, visitors to patients and other persons coming and going, conditions of atmosphere external to the hospital that may have been related first to the non-dissemination—and subsequently to the observed dissemination of small-pox around the hospital; that it cannot in the present state of our knowledge be affirmed that, during the period of delay in dissemination, the weather circumstances were such as to account for the delay; but it might be said that, during the period when infection did spread, these circumstances were certainly of a nature to have assisted in the dissemination. Ozone was present just before, was absent during, and reappeared at the end of the period in which sufferers by the outbreak of small-pox became infected. In the last week of December, 1880, and first

days of January, 1881, the weather was first mild or unsettled, and gradually became colder. During the last days of the old year the mean daily temperature averaged 40.6, in following week 38.4; winds steady from south to west, and afterwards to 11th January from north to east.

9. During the present epidemic period, and most probably during former periods, there has arisen in the atmospheric circumstances of the time, peculiar facility for the dissemination, in an undamaged state, of any matter that may have been given off from the hospital.

Such, then, being the conclusions arrived at by this most skilful and patient investigator, it will, I think, be obvious to all that, however desirable it may be from many points of view, isolation hospitals should be within the limits of the city, town or village, that at any rate those set apart for small pox should be located at least a mile or two from suburbs, until further knowledge is acquired of the manner in which particulate contagious matter is disseminated—unless experience should prove that Dr. Wright's idea of flame ventilated hospitals is a safe one.

With regard to the site and construction of isolated hospitals, Dr. Thorne recommends a moderately elevated one, with soil dry, where the free circulation of air around the hospital buildings is not interfered with, and where an abundant and wholesome water supply, together with reasonable facilities for drainage were available. The most efficient hospitals for infectious diseases consist of (1st), an administrative block; (2nd), at least four wards in two separate pairs, in which patients of both sexes suffering from two different infectious fevers can be treated, and (3rd), certain outbuildings, washhouses, mortuary, etc., etc. He objects both to corrugated iron and wooden buildings, which have occasionally been hurriedly erected to meet with threatened, or existing, epidemics as being too cold in winter, and hot in summer. For the disinfection of clothes, bedding or other articles, he recommends as the best in use, Dr. Ransom's apparatus (See plate No. 27, page 212), which is employed to great advantage in a large number of sanitary districts. A very excellent report on the subject will be found in the St. Matthew Bethnal Green Report for 1881, which you will find at page 28. Dr. Bate, the Medical Officer of the parish, recommends as the latest and best process Mr. Washington Lyons', that of superheated steam.

In the report from the parish of St. Mary, Newington—which, I think, I have before alluded to—will be found some very admirable by-laws, made by the Metropolitan Board of Works on the Management and Building Acts amendment Act, relating to the foundation and sites of buildings, the description and quality of the substances of water, duties of district surveyors, deposit of plans and sections, penalties (page 168), and at page 169, regulations as to dairies, cow-sheds and milk-shops, provisions for the sanitary state of all dairies and cow-sheds, cleansing of the same, as also of milk vessels, contamination of milk, keeping of swine, and registration of dairymen. In the report of the health of the borough of Birmingham you will find (page 45) valuable suggestions for preventing the spread of scarlet fever by patients leaving the hospital, as also a plan of entrance to the undressing room, bath-room, and dressing-room—patient leaving all infected clothes in undressing room, entering nude to bath room, and in dressing-room putting on clean clothes there left. At page 19 reference will be found to diminution of typhoid, as also of diphtheria, a demonstration of sanitary progress; examination of, and action in regard to suspected diseased and unwholesome food; supervision of common lodging houses, and houses let in lodgings; and at pages 60 to 79, Table IX., results of analyses of water, expressed in parts per 100,000, for every month of the year 1881, both of corporation and well waters.

You will notice in these analyses of the monthly continuance of *corporation* and *well* waters a remarkable illustration of the truth of the frequent remark, that waters may be bright, cool and sparkling, and yet highly dangerous from the presence of the products of decomposing nitrogenous matter, and frequently from the presence of specific germs that may have filtered from neighbouring privies into adjacent wells, showing that the corporation waters averaged only of total solids about 30.28; of ammonia, .002; nitrogen, nitrates and nitrites, .231; total combined nitrogen, .249; sewage or animal contamination, .2010; chlorine, 1.4. The respective figures for the several ingredients in the *well*

waters varied for first from 110.80 to 265.60, for second from 0.10 to 1,800, for third from 4.73 to 9.35, fourth from 4.738 to 9.353, fifth from 470.60 to 932.10, sixth from 6.6 to 21.3; and it will be seen that, notwithstanding these high figures, the well waters are, with scarcely an exception, marked clear, whilst the corporation water as a rule is marked more or less turbid. The evident moral to be derived is, that sight and taste are no guides to purity and wholesomeness of drinking water, and that in large cities the use of well water should be prohibited.

In order to obtain yearly exchanges of Reports from the Honorary Presidents of the different Governments represented at the International Congress assembled at Geneva, I distributed the few remaining pamphlets—showing the work accomplished by our Board since its establishment in March—that I took with me from Toronto; the great bulk, however, I had previously circulated in England, Scotland, and Ireland, receiving in return from many of the Health Officers the Reports I now hand over to the Board. As, however, for the above reason, there were but few to give, I have, since my return, mailed to all those Honorary Presidents of France, Italy, Germany, Spain, Low Countries, Hungary, Sweden, Portugal, Roumania, Servia, Bulgaria, Mexico, Switzerland, Belgium, Brazil, and United States, as also to the most prominent Sanitarians in England, and to Dr. Wakly, editor of the *Lancet*, the most recent issues including the weekly chart. By these means we can I think rely on the receipt of exchanges from all, and thus be supplied with the experience and operations of the numerous Sanitary Boards of Europe.

From two countries only I received, at the time I was in Geneva, Reports, viz., from France and Servia. The Servian Report is translated in two languages—French and German—and, as I had my choice, I selected the one I was familiar with.

Dr. Vladan Georgévitch's Report indicates a far more advanced condition of Sanitary Law than would have been supposed to exist, in view of Servia having been for so many years an integral part of the Turkish Empire, and subsequently for a long period a tributary to the Ottoman Sultan. I translate a few passages from the 19th Article, on "Quarantine and Frontier Posts":—

"The duty of these officers is not to allow any person to enter Servia who is infected with any contagious disease, such as smallpox, exanthematous typhus, scarlatina, diphtheria, etc., etc. If a severe epidemic in a neighbouring country menaces the Principality, the Prince may, on the advice of his Ministers, order an increase of the *personnel* of the frontier posts, and decree the opening of new ones.

"Measures to be taken against smallpox:—The local authorities in the whole extent of the country should take measures for obtaining immediate information of the mildest case of smallpox. Every physician is obliged, immediately after he has diagnosed a case of smallpox in his practice, to acquaint the local authorities without delay. If the case occurs in the place where the physician resides, it is his duty to practice isolation as far as possible; that the house should be interdicted and placarded with a special bill; that the same precautions should be observed with regard to houses containing cases of diphtheria, measles, scarlet fever, and exanthematous typhus. He should also have due regard to the chamber of the patient being supplied with an ample quantity of pure air day and night, winter as well as summer. The patient is to be isolated until after his bath following complete convalescence; vestments and bed linen are to be disinfected; ambulances and carriages employed for transport of sick to be on every occasion after use disinfected." If these regulations are not complied with, pains and penalties are affixed. A law also exists for compelling the vaccination of every infant between the age of three months and twelve months; 2nd, every child, on the termination of the course of the primary schools, is to be vaccinated, and notice of it given in the school certificate; 3rd, every conscript of the permanent army, or of the national militia, as soon as mustered in, is to be vaccinated, whether or not he had been successfully vaccinated in infancy. The expense of vaccination and re-vaccination are not to be fixed by individuals. That of the first vaccination of infants is paid out of the national exchequer, at the rate of forty paras for each successful case. When the vaccination is completed in a district the physician receives a certificate of the number of successful cases, and on this certificate he is paid by the Minister of the Interior. Re-vaccination is to be performed gratuitously.

Other sumptuary laws are given on this subject and a variety of others, such as burials, graveyards, measures to be taken for the prevention and mitigation of venereal diseases. There are very numerous and stringent laws relating to drug-shops, druggists, etc., etc.; also laws of a strict nature regarding hospitals, asylums, schools for medicine, for hospital assistants, also minute ordinances with regard to the introduction of diseased cattle—all displaying the greatest amount of study and forethought, but involving an amount of passive obedience and non-resistance that, as a rule, the Anglo-Saxon race would not willingly yield implicit obedience to until at least they had become convinced that only by such means could any hope be entertained that the spread of infectious diseases might be controlled.

To the accomplishment of so desirable an end the labours of this Board are directed, and although most probably for some time we may have to recognize the wisdom of the axiom, "*Festina lente*," our duty is plain: to endeavour perseveringly to educate the people into a willingness to abandon long-conceived prejudices, not only by such means as have been employed since our first inauguration, but also by the frequent publication in the journals of the Province of excerpts from American and European Reports from Government Boards of Health.

When in England I was frequently told that the sanitary procedures ordained and carried out by many of the State Boards in America were altogether in advance of those precautions that they approved of but did not feel, in the present state of sentiment there existing, at liberty to recommend. I allude particularly to the placarding of houses where infectious disease is present, but where, from existing circumstances, more complete and satisfactory isolation could not be practised. Similar difficulties, I apprehend, may be for a time experienced in our Province, unless the situation of the town where an epidemic threatened is so closely adjacent to the frontier as to enlist the coöperation of our American cousins. In that case the pecuniary loss incidental to the enforcement of quarantine regulations would be a powerful argument against a mere sentimental objection. We have, however, more formidable lions in our path than mere sentimental objections, viz., class interests.

Difficulties and prejudices to be encountered cannot, however, deter this Board from the prosecution of the great work commenced; rather will they serve as a spur to renewed effort, and to the enrolling on its banners the words of the late Canon Kingsley: "Let our hearts be bowed as the heart of one man, to say, that so far as we have the power, so help us God, no man, woman or child, be he prince or be he beggar, shall die henceforth of disease capable by human means of prevention."

C. W. Coverton,
Commissioner.

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Ninth " " " " " 1879–80.
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An Act to amend Public Health Act, 1848.

An Act Vesting Powers in Privy Council for Protection of the Public Health.

General Order—Port Sanitary Authorities' Regulations with respect to Medical Officers of Health.

Water Analysis.

Memoranda and Tables, Returns of Deaths, and Returns of Pauper Sickness.

Memorandum on the Duties of Sanitary Authorities *re* Epidemics and Smallpox.

Reports on Outbreak of Enteric Fever.

Reports of Medical Inspectors on General Sanitary Conditions of Certain Places.

Papers concerning Provisions regarding Epidemics and Contagious Diseases.

ARTICLE II.

REPORT OF THE COMMISSION APPOINTED TO VISIT BOARDS OF HEALTH IN BOSTON, NEW YORK, AND ALBANY.

To the Members of the Provincial Board of Health:

GENTLEMEN:—In obedience to the commission of the Honourable, the Provincial Secretary, given in accordance with a motion passed at the Second Special Meeting of the Board, your Committee proceeded to Boston, New York, and Albany to enquire into the details and modes of working of the various Boards of Health of those places.

As the details of the various City Boards are in many ways similar, as are also those of the various State Boards, your Committee have not thought it necessary to detail in order the working of all the Boards, but to point out the essential details of their work, noting any differences which may mark individual Boards.

Your Committee having placed themselves in communication with the various Boards as to their intentions, cordial invitations were received from them, and thus armed your Committee proceeded first to Boston, where they called at the office of the Secretary of the Massachusetts State Board, but unfortunately found that gentleman H. P. Walcott, Esq., M.D., absent, his place being taken temporarily by Dr. Shattuck, who was out of the city at the time, but was expected to return the following day. This gentleman did your Committee the honour of calling upon them, and, having appointed to meet them at his office, showed them the methods of working as at present carried on by that Board. Nothing of great importance was here obtained, however, the chief executive officer being absent, and the Board having undergone within the last two or three years several changes through political causes, which have seriously affected both its organization and usefulness.

This is due to there being attached to the same Department the work of the State Board of Lunacy and Charity, a combination which has limited the operations of the Board of Health proper, and has impaired greatly the efficiency of its own proper work, reducing its work to practical matters relating to public nuisances, such as the pollution of streams and rivers—a work imperatively necessary in a State so largely engaged in manufactures.

Other work, however, such as the publication of weekly mortality statistics from reports from various cities of the United States, legislation for the restriction and prevention of smallpox, and investigations into the nature and causes of malarial diseases, which of recent years have much increased in area in the Eastern States, is still carried on.

Having next called upon the officials of the Board of Health of the city of Boston, your Committee were most courteously received, and through their polite attentions obtained a large amount of information. Before referring to this your Committee would take this opportunity of expressing their appreciation of the kindness shown by Dr. S. H. Durgin, Chairman, Dr. Richardson and the Secretary, Mr. Davis, in explaining to them the details of their particular work.

The composition of the Board is as follows:—A physician as Chairman, a lawyer and a layman.

The staff of Executive Officers in addition consists of:—

1. One or more city physicians with duties of vaccinating, visiting poor districts, etc.
2. A medical quarantine officer.
3. A Secretary.
4. A disinfecting corps.
5. A Superintendent of Health, who has under his control some 700 men, employed in the extensive work of scavenging, granting licenses for various businesses, etc.
6. Inspectors of wards or sections.

The members of the Board are appointed biennially or triennially by the nomination of the Mayor, which nomination has to be confirmed by the Aldermen and Councillors.

Various occupations are licensed and controlled by the Board, under the direction of the City Superintendent of Health. The nature of subjects coming under the notice and action of the Board will be indicated by an enumeration of the blank forms in use by it, copies of which have been handed to your Committee:—

1. License to remove manure.
2. License to sell fish.
3. Directions against depositing fish, refuse, etc.
4. Directions for people storing hides, so as to prevent nuisance.
5. Forms directing that horses affected with glanders must be killed.
6. Forms of licences given to soap-men, etc.
7. Form of agreement to pay for drainage of premises by the Corporation.
8. Forms to be filled in by Inspectors of Schools.
9. Forms directing against the depositing of salt on sidewalks.
10. Copy of quarantine regulations, controlled by the city.
11. Circulars with precautions against diphtheria and scarlatina, and for preventing the scholars of an infected family going to school.

Some of the principal duties with which the Board concerns itself are the following:

1. The extensive work of preventing and abating nuisances in a city of 400,000 inhabitants is to be noted. The arrangements for effecting this are apparently very complete and thoroughly carried out.

The city is divided into 25 wards, comprised in 11 sections, with Inspectors with special duties in each. When a nuisance is present in any locality, complaint being made in writing to the Secretary, he immediately places a filled up slip in one of the two boxes, in the offices, set apart for the Inspector of the district where such nuisance occurs requesting him to make an immediate examination of the premises. After examination, the Inspector places his filled up report in box No. 2. The Secretary thereafter examines it and takes action in accordance therewith. If it be reported on as constituting a nuisance the Secretary sends a first warning to the owner, or occupier of the premises, to have it immediately removed. The Inspector again visits the premises to see that the notice has been obeyed. If not, a second warning, and if necessary, a third and final is sent, stating that if not remedied in a certain number of days the premises will be forcibly vacated. This final remedy is not often necessary, only 25 evictions having occurred during the last year.

This process shows how thorough in their operation and absolute in power are the laws which this Board enforces.

By this system too, every house in the city may sooner or later come under the notice of the Board, and since all inspections made are registered a complete knowledge of every house in the city may be obtained.

During the last year it may be stated that 8,086 nuisances were abated on complaint to the Board.

2. The next important duty of the Board is the prevention of the spread of contagious diseases. Here a compulsory system of notification of infectious diseases is adopted. Whenever such information is received at the office of the Board, one of the city physicians immediately visits the house and sees that every precaution is being taken for the isolation of the patient. But, further than this, a minute inspection of the premises is made with the object of discovering, and remedying unsanitary conditions; and where such are found to exist, the owner or occupant is immediately ordered to remedy them. Thus, in the case of diphtheria, the result of the examinations during the past year revealed the fact that with a total of 1,704 cases, 601 of which were fatal, it was found that 1,342 occurred on premises where the drainage was defective, and only 235 where the premises were in good sanitary condition, at least defects were not noticed.

Where the precautions taken by the family or their physician were imperfect fumigation was undertaken by the officers of the Board. There were 316 such cases during the past year.

The sewerage of the city was examined into, when your Committee found that the Boston Board had urged, and had been successful in getting action taken in the matter of an intercepting sewer along the water front of the city. Its estimated cost when completed will be some $6,000,000.00, and will then have been some eleven years in progress. Your Committee also found that a systematic examination of house-drainage is being carried on by the Board, with the ultimate aim of having a complete knowledge of the positions of house-drains and their condition throughout the whole city. Their chief work is in detecting broken drain-pipes and defective gas-pipes.

The inspection of school-houses is carefully undertaken by this Board, by which the condition of the drains, the ventilation and lighting of the school and many other points are enquired into.

Your Committee would next refer to the precautions taken by the Board of Health in Boston for the prevention of small pox. As is common at these seaport cities this disease is frequently introduced by immigrants. This has necessitated the establishment of strict quarantine regulations for such cases, while at the same time a city Small-pox Hospital is kept for the removal of such patients as the Board may deem necessary. Strict precautions, however, in the matter of vaccination are taken, especially where any number of cases, approaching an epidemic, has occurred. Thus last year vaccination offices were opened in 10 convenient localities, when 25,340 persons were vaccinated or re-vaccinated by thoroughly competent physicians, and with the best bovine vaccine. These gentlemen urge the desirability of something being done toward having vaccination regularly done by city authorities rather than have a rush during the times of a scare, when often the haste prevents its being done either thoroughly or with proper record being taken of the results.

This subject of vaccination brings your Committee to speak of the result of another part of their duty, in visiting a prominent vaccine establishment recommended by the Chairman of the Boston Board of Health for the high quality of the bovine vaccine supplied by it. Arrangements having been made for a visit to this establishment—the New England Vaccine Co., No. 10 Everett Avenue, Chelsea Station, Boston, Mass.—situated in Chelsea, a *faubourg* of Boston, we were taken there under the kind direction of C. F. Hodgkins, Esq., a gentleman connected with it, and there were introduced to Dr. Cutler, the Superintendent. This gentleman very courteously conducted your Committee over the premises, explaining at length the various details of the working of the establishment. A brief description of what your Committee then witnessed may not be out of place.

Dr. Cutler showed us in a dry apartment in the ground, kept cool by a refrigerator, and free from moisture by a hygroscopic substance, several air-tight glass jars, in which he kept his supply of "points." Dr. Cutler prefers the bone points, well made, to quills, although he uses quill-slips as well. Having gone to the stables we found there three animals, one matured and two maturing. These were young cows, Dr. Cutler finding them on the whole more convenient to obtain, and in every way better suited to his purpose.

The process carried out may be described as follows:—A healthy cow having been obtained from the farm a few miles out of the city, is brought to the stable and there vaccinated by means of incisions made through the epidermis and into the cutis of the posterior portion of the thighs, which have been previously shaved. Fresh and pure vaccine lymph from the matured vesicles of another animal is now well smeared on the wounds, when the act of inoculation may be considered as completed. All the available surface of the thighs posteriorly is covered with scarified patches two or three inches long and half that in width, at short distances one from the other. The cow is kept in the stable thenceforward, when by the eighth or ninth day the various incisions in each patch have become united into one enormous mass of confluent vesicles, with a diameter of two or more inches. Occasionally may be seen a single umbilicated vesicle, called a secondary vesicle, near the incisions, the result indirectly of the inoculation.

The work of preparing the bone-points is now gone about. The cow is secured so that she can do no injury, then the whole large scab is cut away thinly with as little flow of blood as possible. A short time is allowed to elapse, when the lymph begins to flow

freely from the surface of the abrasion. Everything having been done in as clean a manner as possible, an employé begins to charge the points, endeavouring to avoid the reception thereon of any blood, or anything else than pure lymph. This process is carried on with one of these huge vesicles until all the clear lymph has been appropriated for the points, when another vesicle may be proceeded with.

It is thus seen that to keep a large supply on hand one vesicle ought to mature at least every other day. We were informed that any points which are not disposed of within a week are re-charged, so that none but fresh vaccine is sent out.

This, briefly described, is the process carried out in the various vaccine establishments, with slight variations in mechanical details, such as the use of quill-slips, ivory points, etc., the portion of the animal inoculated, and the age of the animal used for vaccine purposes. Dr. Cutler does not consider it advisable to make use of *crust*, unless it be that from the true vesicle, occasionally forming near the inoculation vesicle, from the danger there is of having blood, pus and other septic matter associated with it.

Your Committee, while recognizing the desirability of having such a vaccine establishment in Ontario, if not under the immediate control of the Board, yet so closely associated with it in interest, as that it would be a condition of its success to supply reliable vaccine, does not feel that the time has come to do more than commend the project to the enterprise of such private persons as may undertake the many details involved in such a business. Whether to such an one it would prove a financial success must depend as largely upon the business energy of the individual as upon his scientific knowledge of the dangers to be avoided and the special ends to be sought.

The labours of your Committee next extended themselves to New York, when the working of the Board in that city was enquired into. As might be expected, the methods adopted there are much the same in nature as those of Boston; but there is one difference in the fact that here arrangements have to be made for the sanitary work of a city of 1,200,000 souls, confined within certain fixed limits, owing to the location of the city on Manhattan Island. In fact its work has to be carried on in something after the manner of an army Department. This Board of Health has also under its management the whole task of keeping the city clean—the removal of offal and night soil, the sweeping and watering of the city, the removal of garbage, the regulation of building sites, etc.,—all this being done by the expenditure annually of a sum approaching $700,000. It is a huge machine whose work is only possible by thorough organization.

As already noted it would be both superfluous and unnecessary to detail all that was observed by your Committee in New York, but it will be desirable to point out here and there interesting points of difference.

Here, too, your Committee received every attention from the officers of the Board whom they met, and desire to place on record their appreciation of the kindness more especially of the Secretary, Col. Clarke, Drs. Day and Nagle, Mr. Collins, and various other gentlemen in the different departments of the Board.

Similar methods are adopted for dealing with nuisances as exist in Boston—by means of some fifty Sanitary Inspectors, who are also policemen, with powers of serving warrants, etc. Attached to the Board is a Law officer, whose sole occupation is to decide legal questions arising in connection with the duties of the Board. The department of its work, however, which is most in contrast with the custom of many other places, and which has been developed to such a high degree of perfection, is one which has to some extent grown out of the necessity for remedying evils consequent upon the crowding together of people in tenement houses, through the limited power which the city has for extending its boundaries.

The city was two years ago surveyed—an army of Inspectors took plans of every tenement and apartment house in the city, and these have all been entered in registers; the ground occupied, the height of house, the number of stories, the number of occupants, the position and condition of the house, the water supply, drainage, etc., are all noted. With these details in its possession the Board has endeavoured to rectify the evils arising from over-crowding, and these ends are carried out by the Inspectors. Not only are these plans of houses provided, but the Board requires that all plans of

houses to be built be submitted to it for approval. Before permission is given to erect buildings the owner or architect must fill in a blank form furnished by the Board, in which minute specifications for every portion of the work necessary to be considered with regard to health and safety are set forth. These specifications have to be brought before the Board, and be in accord with its views, before the building is allowed to be proceeded with, and they must be adhered to, frequent inspections being made to secure this result. A copy of the above form of specifications will be found amongst the documents enumerated at the conclusion of this Report. Tenement houses must be built with drains, water supply, &c., sufficient and good; sufficient light, and sufficient air-space; and before being occupied the work must be approved by the Inspector of Buildings. The department supplies landlords with models of buildings to be adopted, if desired, or if different to be altered in conformity with regulations. Licensed plumbers and gas-fitters only can be employed.

With regard to the disposal of excreta, the Board is gradually abolishing the privy-pit system. Whenever any of these recepticles have to be closed the *water carriage* system is substituted.

Independently of the system of Vital Statistics for the State of New York, which will be referred to hereafter, the City of New York has a very perfect Record of Statistics of its own. Great pains are taken to make this accurate and complete as regards mortality statistics, and with this object in view the rules regarding burial permits are very stringently enforced, no dead body being interred or sent out of the city without such permit. A very complete Mortality Report is issued weekly.

A vaccine farm is maintained in connection with the Board. This department is under the charge of Dr. Taylor.

Your Committee next visited the offices of the

State Board of Health of New York,

at Albany, where they were received with the greatest kindness and courtesy by the affable Secretary, Dr. Elisha Harris, a Nestor in the work of sanitary science, who devoted himself during the entire day and well on into the night, to explaining to your Committee various matters connected with public health in the State of New York.

The first topic taken up was that of

Immigrant Inspection.

The system of inspection in force on some of the routes of immigant travel, from the port of embarkation to destination, has been fully described by Dr. Rae in his Report of the Convention at Port Huron. Your Committee need merely allude therefore to the various points in the system as carried out in the State of New York.

There are two Inspectors—medical practitioners of course—in the State. One of these acts on the New York Central and Hudson River Railway. Residing in Rochester, he meets the train at Syracuse or some point between there and Albany, according to the size of the train. On boarding the train he obtains from the conductor information as to the number of cars, number of passengers, reports of suspected disease and other points necessary to the passing of his weekly report to the Secretary of the Board, and which will best be shown by the subjoined report for the week ending 23rd of August, which report had just been received by the Secretary on the morning of our visit.

	August								
	17th	18th	19th	20th	21st	22nd	23rd	Totals	
Number of Cars	6	3	6	2	0	10	3	30	Vaccination protection cards were exhibited by 935 persons.
" Passengers.	211	117	187	60	0	398	114	1094	
" Sick	0	0	0	0	0	0	0	0	No cars in a filthy condition.
" Dead	0	0	0	0	0	0	0	0	On the 17th emigration was greatest to Illinois and Wisconsin.
Via Buffalo.....	206	112	181	66	0	387	108	1060	
" Suspension Bridge.	2	5	6	1	0	5	1	20	On the 18th, 19th and 20th to Illinois, Ohio and Wisconsin.
" Rochester	0	0	0	0	0	4	1	5	
" Lyons.....	3	0	0	0	0	2	4	9	On the 23rd to Illinois and Minnesota.

The Sick had..... (No sick).
Death was caused by..... (No dead).
Concerning Loss of Cards:—159 were without cards; some were Americans.
The Number and Condition of recent Vaccinations (within 7 days):—The whole number, 184; successful, 83.
Concerning Immigrants never Vaccinated:—There were not any.
Destinations of the Sick.....
The Suspicious, and Facts Contagion.....

(Signed) ALBERT L. PERRY,
Inspector of Immigrant Trains at Rochester.

A separate sheet gives "destination of [all] immigrants."

After obtaining all available information from the conductor, the Inspector enters the passenger cars. Holding up the fac-simile of the "Vaccination—Protection" card, he requires passengers provided with them to exhibit them. Those who have them not are examined as to vaccination, and, if necessary, they are vaccinated. A cursory examination of all is made, it being more exact if circumstances point to the necessity for its being made so. If any are found so sick as to render it unsafe for themselves or others that they should proceed, the Inspector telegraphs to the first suitable stopping place and has them put off and properly cared for. In this way the lives of some children (apparently moribund from a virulent attack of measles) were saved shortly before our visit. The sanitary condition of the cars is also noted, as will be seen by a reference to the sample report given above. It is needless for your Committee to point out how many valuable items of information are stored up in these reports, both for sanitary, statistical and other circumstances, and of what benefit the system may be with immigrants and to the public amongst whom they come. These points will be apparent to any thoughtful person, upon a perusal of the reports.

It will be seen by a reference to the report, that the immigrants follow two divergent lines from Rochester (the relative numbers in some weeks are the reverse of those given in the sample). The Inspector will have at least finished the inspection of the cars for one diverging road before reaching Rochester, and can then go on with the unfinished one after leaving the first.

The other Inspector, on the Erie Road, has also two routes, which again sub-divide into four—one for the southern shore of Lake Erie, one for Dunkirk, and two for points to the north of this.

It is not yet definitely determined how bills for persons detained *en route* are to be settled. They are sometimes borne by the Federal, sometimes by the State, organizations.

Another matter which engaged the attention of your Committee was the

ORGANIZATION OF LOCAL BOARDS OF HEALTH,

and their relation to the State Board and to the people. In this connection there is one point which your Committee would recommend to your consideration, viz.: That it is the duty of every municipal organization in the State to appoint a Local Board of Health, and every Board of Health has to appoint a Medical Health Officer. Hence it is a known and recognized fact throughout the State that there are matters which require constant official oversight with a view to the preservation of health in communities; and by a general provision of the Legislature, the services of certain persons are secured for such oversight—they making it their business to look after matters connected with the health and safety of the people in the community to which they belong; whereas, with us the council of the municipality "*may* delegate the power of its members as health officers to a committee of their own number, or to such persons . . . . . as the council thinks best;" or it may attend to health matters, or neglect them, as the case may be, amidst the hours of its other business. In conversation with a prominent member of a rural municipal council a few days ago, some remarks were made which led one of the members of your Committee to ask if his council had responded to requests contained in one of the circulars addressed to it by this Board. He replied that when they got through other business more immediately pressing on their attention, they had no time for such matters as I referred to, and the circular was lost sight of. Similar experiences have been related by other members of this Board. The Legislature of the State of New York, like that of Michigan, provides against this; and it may be with the intention of more emphatically preventing any such danger of neglect, that the law of New York enacts that the members of Boards of Health of cities and incorporated villages, shall not be members of the council; a provision which we might think goes too far. In this State, as in Michigan and many others, every municipality must have a *Medical* Health Officer. These *bona fide* Local Boards, in existence throughout the State, form an excellent channel, both for obtaining and imparting information, and for carrying into practical effect the advisory measures and plans resulting from labours of the State Board.

The system of

VITAL STATISTICS

in operation in the State, was next explained to your Committee. As in our own Province, the Births and Marriages are registered as well as the Deaths. All the original certificates (except from Brooklyn, New York, Yonkers and Buffalo, which have special charters of the olden time) are filed in the offices of the State Board. It will be observed that the form of Death certificate embraces many more points than is usual in other countries. Your Committee would draw your attention to the fact that the law forbids the removal by carriers of any dead human body without a permit, so that they have a transit permit, as well as the burial-permit which they have in common with us.

The Board renders good service in

INVESTIGATING AND REMEDYING NUISANCES,

some of them similar to some of those in regard to which we have been called to act during our short existence. Two or three of these were on hand at the time of our visit, some caused artificially by manufacturing processes, and one, a very singular one, produced by progressive changes of nature. A hill stream had by its impetuosity at a certain curve in its course, changed its channel and formed a marsh or sheet of stagnant water, giving rise to malaria at a point very high above the surrounding country. Dr. Harris was planning to visit the spot with one of their Sanitary Engineers on the day following our visit. In many of these investigations the services of a sanitary Engineer are called into requisition, as in

Advising Municipalities Regarding Disposal of Sewage,

a matter in which large co-operation and interest exist between the State and Local Boards and Municipalities.

The endorsation by the Governor of the recommendations of the Board regarding nuisances (those on a large scale only being taken up), and other such matters, gives to them Executive force. The Board has also been engaged in collecting information regarding, and otherwise

Investigating the Causes of Certain Diseases.

Some of these investigations have been carried on in connection with other State Boards and the National Board. The subject of one of its investigations is

Malaria,

and the sets of questions sent out to obtain replies, and the little skeleton maps to be filled up by correspondents, will be found among the papers accompanying this Report, as also will circulars connected with similar investigations of other subjects of sanitary interest, such as the condition of School Houses throughout the State.

The laws regarding contagious diseases, and other sanitary matters, are similar to those in our own Province, and the work of the Board similar to ours.

Their Constitution allows the State Board to deal with the adulteration of foods and some other matters, which with us will come more properly under the cognizance of the Dominion authorities (as well as of the Municipalities).

Your Committee also received from Dr. Harris a copy of the By-laws of the Board of Health of the city of Albany.

Your Committee further took occasion to enquire at Portland, Me., into sanitary matters there. The organization there is very poor and defective, and there was little information to be obtained. The City Engineer explained some matters connected with the sewage of the city, a tumbling basin in a low part where there was little fall being a point of interest. This gentleman presented your Committee with a copy of the reports of the various officials of the city.

Since writing out that portion of the Report bearing upon immigrant inspection, your Committee have come across the following newspaper item, in which the exception proves the general rule as regards the benefits of that system, and the dangers avoided by it:

How Infection Spreads.

Hornellsville, N. Y., November 27th.—"Roy Robinson, the Erie employé who unknowingly cleaned the car on which Weston, the smallpox patient, had lain for some time, began breaking out with the disease on Friday night. Some members of a family named Ford, with whom Robinson boarded, have also shown signs of infection. Dr. Robinson has charge of the unfortunate man's case, and every effort is being made to prevent the spread of the disease."

DOCUMENTS OF THE NEW YORK HEALTH DEPARTMENT.

A.— 1. Registration of Master Plumber.
2. Registration of Journeyman Plumber.
3. Weekly statement.
4. Notice to submit Plans and Specifications.
5. Notice of Violation.
6. Inspector's Report of Plumbing and Drainage.
7. Copy of Act to secure Registration of Plumbers and Supervising of Plumbing in New York and Brooklyn.

8. Notice of Violation.
9. Specifications of Plans for Plumbing and Drainage.
10. Application for permission to lay Earthenware.

B.—11. Permit for Tenement Houses.
12. Plan for Lighting and Ventilation of proposed Tenements.
13. Tenement House Acts.
14. Plans for a new Building.
15. A number of plans forwarded.

C.—16. A Night Medical Service.

D.—17. Sanitary Code of the Board of Health.
18. Sanitary Inspector's Report.

E.—19. Reported Mortality with Actual Mortality for 1880.
20. Summary of Births, Marriages, and Deaths.
21. Birth Returns.
22. Return of Given Name for Children.
23. Certificate of Death.
24. Return of Still-births.
25. Transcript from Return of Births, Marriages, and Deaths.

F.—26. Application for a Transit or Disinterment Permit.
27. Transit Permit.
28. Returns of Marriages.

DOCUMENTS OF THE NEW STATE BOARD OF HEALTH, ALBANY.

From Dr. E. Harris, Secretary.

1. Organization and Powers of Local Boards of Health.
2. Laws relating to Registration of Births, Marriages, and Deaths.
3. Domestic Pestilences and Sanitary War against them.
4. On methods of Sewerage for Cities and Villages.
5. Records of Vaccination in New York State.
6. Annual Report of the New York State Board of Health.
7. An Act for the Preservation of the Public Health.
8. Powers and Duties of Local Boards.
9. Prevention of Diphtheria.
10. Notes on Contagious Diseases of the Eyes in Schools and Asylums.
11. Report on the Methods of Sewerage for Cities and large Villages.
12. Duties and Procedures of Local Boards of Health, with appended Memorandum on Contagious Disease Refuges.
13. Memorandum of Rules to be adopted to prevent the Spreading of Contagious Diseases in Schools.
14. Sanitary Rules for the Prevention of Scarlet Fever.
15. Sanitary Precautions to prevent the spreading of Infectious Diseases.
16. Instructions for Disinfection.
17. Concerning Vital Statistics and certified Records.
18. Prevention of Smallpox.
19. State Regulations concerning the Transit Permits for Burials beyond County Limits.
20. Statement relating to the Law for Safety-testing Illuminating Oils.

ARTICLE III.

REPORT OF THE DELEGATE OF THE PROVINCIAL BOARD OF HEALTH TO THE INTERNATIONAL SANITARY CONGRESS AT GENEVA.

To the Chairman and Members of the Provincial Board of Health:—

GENTLEMEN,—A brilliant assembly gathered in the Aula of the Geneva University, at two o'clock in the afternoon of Monday, the 4th of September. This very beautiful edifice, in the Grecian style of architecture, approached by a lofty flight of steps, is situated in the Rue de L'Université, looking into the Jardin des Bastions. The Aula or Convocation Hall, with its three galleries capable of holding a very large number of persons, and with acoustics all that could be desired, was admirably adapted for the purpose of holding each afternoon session of the Sanitary Congress. On the lower floor, five large class-rooms were set aside for the morning attendance of the various sections.

Dr. Lombard, of Geneva, occupied the Chair; most enthusiastic applause from the large audience following when Dr. Pasteur took a seat by his side. M. Lombard first called on one of the authorities of Geneva to address the audience—M. Schenck. He remarked that Switzerland was the country of all countries for international congresses, especially as their motives were calculated to be of general benefit to humanity. The preference which Geneva enjoyed was due, not merely to her geographical position, but to the ready sympathy of her population and the ardent champions any good cause would find amid the Swiss people. It was to Geneva that the honour of the International treaty for the succour of the wounded in war belonged, and at Geneva a great war had been prevented by the arbitration with respect to the Alabama claims. Switzerland having much to learn, was particularly eager to welcome the Sanitary Congress. The death rate was not 17 per thousand, but in certain Cantons it varied between 25 and 29 per thousand; and they hoped to learn from the discussions that would take place, the best preventative means for diminishing this excessive mortality. Another category of avoidable disease was that of zymotic ailments, which, in Switzerland, carried off each year large numbers of individuals, a great many among them, middle aged, leaving after them orphans chargeable on the ratepayers. Other important causes of death indicated in the mortuary tables are consumption, alcoholism, suicides and other diseases, which, in a great measure, are equally avoidable. Although Hygiene was held in honour by the nations of antiquity, and we have reason to acknowledge that the sanitary laws of Moses have contributed to give to the Jewish people the remarkable vitality which is peculiar to them, it is nevertheless true that to our age, and to a period relatively recent, the honour belongs of having first made apparent, and chronicled its happy results. Although all agree that health is the very first of blessings, a small number alone are conformable to the wise laws of Hygiene, and the majority—we state it with regret—are still slaves to the prejudices of the past. May this Congress of Hygiene and its exhibition, that we welcome to-day, contribute to dissipate the errors and to enlighten public opinion! May your generous work, which is announced under such fortunate auspices, bring its stone to the edifice always unfinished of human progress!

M. Heridier, President of the Council of State, after welcoming the members of the Fourth International Congress, stated that the choice of their ancient city for holding the Congress was an honour for Geneva. International Congresses for the advancement of science are homage rendered to social progress. They make the imperfections and the vices of our modern civilization to disappear by the light they ceaselessly shed, breaking down those scourges of humanity, ignorance, routine, fanaticism, tyranny and war. The middle age, with its long centuries of ignorance, when the body was neglected in attention to the soul, when prejudices and vicious customs were regarded as holy, and Hygiene disregarded, was often most cruelly punished with pestilences, plagues, and desolating epidemics.

May the sun of science and light illuminate the whole universe, without distinction of race or language, so that nations and individuals may live more and more under better conditions of peace and prosperity!

M. Le Cointe, Delegate of the Administrative Council of the City of Geneva, thanked the Congress for the privilege they had accorded in choosing the city of Geneva from among others, as a place of re-union of delegates from such very diverse nationalities. "Animated with sentiments purely philanthropic, you seek outside of all distinctions of nationality, the true interests of the classes of working people, so numerous and important; in improving their health and rendering their humble abodes less gloomy to live in; in giving to the country as to the cities; to adults equally with children, the knowledge requisite for assuring their well-being; you seek to augment their bodily strength, and by that to multiply the moral and intellectual forces of individuals. It is to the economist, to the school-master, to the working man, to the philanthropist, to public administrators that your science addresses itself, and under this bearing the municipal authorities are the first to be benefited by your labours. In your programme prominently appear questions to us of great interest. Alcoholism makes considerable ravages among our urban and rural populations. Teach us gentlemen the best means of combatting this formidable enemy to the home! You will, during your session, traverse our streets, visit our schools, inspect our public establishments, and your attention will naturally be directed to the habitual subjects of your specialty. You will, doubtless, from a hygienic point of view, find matter for observation, and we invite you to make a frank exposition of all local defects. The Swiss were a proud people, but our motto '*Post tenebras lux*,' will be to you a sure guarantee that we seek light on everything and everywhere, and we shall endeavour to profit as much as possible by the instructions you bring to us. May the city of Geneva abundantly profit by your labours."

Dr. Lombard, as President of the Committee of Organization in offering welcome to the International Congress remarked that while the members could not expect the royal reception and sumptuous entertainments which they had received at Turin, they might depend on the most cordial greeting. "We most cordially invite your coöperation in elucidating the numerous questions contained in the programme we have prepared for this Fourth Congress of Hygienic and Statistical Science. Before entering upon them, allow me to offer a few observations on the hygienic improvements which have been accomplished in the city that has the honour of receiving you. It was not the present generation, but their ancestors, who were to blame for their narrow streets, but they were not chargeable for not having adopted modern improvements, neither were they responsible for the anti-hygienic conditions that resulted from the construction of a city shut in by fortifications, the houses having to compensate in height for the very narrow spaces reserved for them; as a consequence air and sunlight penetrated with difficulty into these dwellings. One street alone, the Market, was the exception, but this was so obstructed by the stalls of a permanent nature that light and air could with difficulty circulate in these houses of four or six stories along the street which constituted the principal business thoroughfare. That happily now is in the domain of the past, but is sufficient to explain why fifty years ago very numerous cases of spinal diseases, of goitre and of scrofula were to be found in our streets, whilst actually these infirmities have now become to a certain degree exceptional. It was not only the interior of the city that presented numberless imperfections, it was also the borders of the lake and of the river Rhone, which were lined with hovels and tumble-down buildings, the appearance of which was anything but pleasant. At the same time the absence of docks allowed the water of the lake to penetrate into the streets with all the *debris* derived from the delapidated houses on the river. This condition no longer exists, as you will have noticed in passing along our quays, with elegant houses and ornamental gardens bordering them. But the most important transformation without doubt, from a hygienic point of view, was the removal of the ramparts and the filling up the moats surrounding them, which enabled the authorities to lay out spacious streets where air and light freely circulated, and where a large number of private mansions, as well as of public edifices, such as the one we have the honour of receiving you in, which contains not only the large halls and lecture rooms of the university, but also one wing devoted to a museum of natural history, and the other to a public library. The suburbs and environs of the city have been covered with neat houses situated in gardens, where the citizens can respire

the pure and vivifying air of the country after the fatigues of the workshop and of the counter. As for those who cannot live out of the city, our magistrates have procured for them the enjoyment of five or six parks and gardens, where you see every day the children diverting themselves and the old people warming themselves in the sun. Geneva was built on an amphitheatre, freely swept by the prevailing winds, notably the cold north wind. This might tend to increase neuralgic and inflammatory diseases, but it carried away or arrested the development of epidemics, as was evidenced when cholera visited us for the first and last time, and when, instead of spreading, it disappeared in a few days under the influence of a strong north wind. The same happened when a bad epidemic of influenza had attained a great development, and it sufficed for the advent of the north wind to make it cease instantaneously. The water supply was also remarkably pure, according to Professor Tyndall one of the purest in Europe. We should be rejoiced if this scientific endorsation encouraged our citizens to make greater use of it, and not to substitute for this healthy and inoffensive liquid alcoholic liquors, the ravages of which are daily increasing amongst our population. This scourge reckons every day numerous victims, the proof of which is unhappily furnished by the number of drunkards admitted to the wards of the hospital, a number as large in a single year as it had been during thirteen years of my services at the old hospital. Even allowing amply for the increase of population which is certainly not thirteen times larger than formerly, we are forced to consider this enormous augmentation as a very sorrowful progress of the abuse of alcoholic drinks. In passing from drinks to alimentation we can affirm that that of the inhabitants of our city is substantial, abundant and of good quality. As regards butchers' meat, I have found by a table published by a German doctor that Geneva occupies a high position in animal consumption. I can confirm this by personal knowledge at the time that I visited a great number of patients among the working classes, as I found generally on their tables excellent meals, soup, meat, and vegetables. It is very probable that this substantial nourishment contributes much to the diminution of spinal and scrofulous affections which formerly were so wide spread. Further the visitors will have seen that the schools are built like palaces, palaces not for the dwelling of kings, but for the education of the youths who are to become the sovereign people.

The Secretary-General then read his Report, from which it appeared that the governments of France, Italy, Spain, Roumania, Hungary, Holland, Servia, Sweden, Mexico, Portugal, Prussia, Bulgaria, Canada, Switzerland, and Belgium had sent special delegates. Further delegates were sent by the Municipalities of Rheims, Bucharest, Geneva, Paris, Lausanne, Neuchatel, Roth, Seville, Lisbon, Nancy, and very many other towns. A number of societies and academies from all these towns and countries, had also sent official delegates.

Dr. Pachiotti, President of the Turin University and of the third International Congress of Turin, then delivered a most eloquent and fervid speech, proposing that Dr. Lombard should be President of the present Congress. Want of space alone prevents me from translating this most impassioned and classic oration, the most telling of all delivered during the session of the Congress; any abbreviation would do injustice to the grace of diction and Ciceronian eloquence by which it was characterized.

After the appointing as Honorary Presidents of the Congress the delegates from the respective countries represented, and delivery of other speeches from M. Fauvel, Van Overbek de Meyer, Czatary, Georgewitz, and Varrentrap, the first sitting of the Congress was closed, the members retiring to their respective hotels to prepare for the official reception held the same evening in the Foyers of the Grand Opera by the City authorities. This proved to be a most brilliant affair. The reception salons were magnificent in structure, proportion, and decoration; the hospitality of our civic hosts unbounded, and the fine selections from operatic music by the band of the Conservatoire formed most agreeable interludes to the hum of conversation carried on in almost every language of Europe.

TUESDAY, 5TH SEPTEMBER.

In the morning, at the time appointed, the members of the Congress distributed themselves into five sections :—1st, General Hygiene ; 2nd, Public ; 3rd, Application of the Science ; 4th, Hygiene of Schools and Veterinary Hygiene ; 5th, Demography or Statistics, and put in practice the principles of this division of work.

In the second section the principal subject, the disinfection of the rooms and garments of patients labouring under infectious diseases, was introduced by Dr. Fatio, of Geneva. His discourse was principally limited to a series of experiments that he had made, principally on the effects of sulphurous acid for the above purpose. Professor Vallin, of Paris, brought forward some observations differing from the previous speaker, and made an excellent address, founded evidently on a long and careful study, not only on the effect of sulphurous acid, but also on the comparative effects of other disinfecting substances, showing that it does not suffice to discover a sure method, but that it is necessary that the agent employed for destroying the microscopic germs, animal and vegetable, that we are scourged with, should realize two other conditions—one that it should not injure the fabric of the garments or bed-clothes to be disinfected, the second that it should be cheap and of easy application by the public. Finally that we must recognize that with the exception of some chemical vapours, it is hot and moist air which is the most efficacious destroyer, and the most easy of employment. As a preventive means, M. Vallin particularly desired that the hospital attendants should be dressed in a long houppelaude (overall, or long woollen riding coat) during the time they were exposed to infectious contact, and that these should be laid aside immediately after quitting the wards ; that the attending physicians should change their clothes, and be very scrupulous in regard to washing the hands and nails. After a reply from M. Fatio, Dr. Sonderegger, of St. Gall, read a communication written in German, afterwards an abstract of it rendered into French, by the Secretary Dr. Cheneviere, who laid down certain propositions : 1s , That the hygienist ought not for a moment to pretend to perfection, but should content himself with those means which for the present state of the science may be considered the most rational, until further progress has been made ; 2nd, That the physician should be equally scrupulous with the surgeon in the disinfection of his clothes and body. He recommended principally the vapour of chlorine. To his colleague, Dr. Ambuhl, he confided the task of explaining two well executed pictures—the first representing a soldier's sentry box, furnished with a door, with a round aperture at the top ; by a lower drawer or slide, the substances required for developing chlorine are introduced. The person to be disinfected enters the sentry box and in order to breathe during the chemical discharge of vapour, he places the nose and mouth at the aperture at the top. The second apparatus is a species of stove or kiln destined to receive the garments which are to be disinfected by the same method.

The physician of the Hospital for Children at Zurich, read in French and German a paper endorsing the experiences of the professor of St. Gall, and proving, among other things, that contagion reappeared immediately that the hygienic precautions recommended by the latter were neglected. Some other delegates spoke on this important subject ; one of them remarking that corrosive sublimate is the most destructive substance for these microscopic elements, especially for spores. Dr. Bourneville, of Paris, terminated this most interesting debate by a recital of his views of the necessity for the creation of schools for hospital nurses and attendants. In the third section or application of hygienic science, M. Durand Claye treated on the question of drains. In the first section, General Hygiene, MM. Arnould, of Lille, and De Feremille, of Lausanne, discoursed on the question of the etiology and prophylaxis of typhoid fever. Afterwards Dr. Czatary, Member of the General Council of Hygiene of Hungary, expressed with warmth the necessity for an International Hygienic Convention, of which he foreshadowed the principal objects : 1st, that the International Hygienic Convention should have for its aim the establishment of general laws for everything concerning the protection and maintenance of public health ; 2nd, that all governments who have established equal laws relative to public Hygiene, should join this International Convention ; 3rd, the consenting governments should abolish all difficulty relative to free circulation

and commerce; 4th, a committee of international surveillance, constituted of delegates from the consenting States, should superintend the scrupulous observance of international Hygienic ordinances.

In the event of the present Congress accepting the principles of this Convention, M. Czatary proposed: that the Congress of Hygiene, now assembled at Geneva, should nominate a committee of seven or nine members, to frame the special articles of the Convention; that the work of this Committee should be submitted for discussion at the next meeting of Congress, and, after conclusions had been arrived at, they should be presented to the respective governments, as the advice of experts in public hygiene. The Committee named will establish, during the sitting of the present Congress, the *modus procedendi* that it will follow in the work confided. These propositions were adopted.

At two o'clock the public attended with impatience the discourse promised by the celebrated Pasteur, on the question which day by day grows in importance from the discoveries made by this illustrious worker, and also from the practical results that at present we have only glimpses of. The discourse related to a subject, but little known to the general public, known as the attenuation of virus. A paper that occupied nearly the the whole afternoon, can only be briefly summarized; M. Pasteur's experiments and labours may then be thus epitomized: Our knowledge of virus began with chicken cholera, that we succeeded in attenuating and preserving for inoculating other fowls. To obtain this precious modification it sufficed to expose the virus to the oxygen of the air. These facts relative to the microbes, or microcci, of fowl cholera, were applied to charbon by experiments, made with the valuable assistance of Doctors Chamberlain and Roux. It is to be regretted that M. Pasteur, whose reputation as a scientist is world-wide, should, during his address, have alluded in a manner which, to say the least of it, betrayed irritation with Dr. Koch, of Berlin—who was present in the theatre of the University, and who, as is generally known, has been opposed to some of the views of Pasteur—on scientific grounds only; and the author, in quoting, pronouncedly displayed his regret that this scientific and international tournay should at times have been characterized by a departure from parliamentary rules. The Professor recalled a series of experiments that were made on two children and on a workman who had died from hydrophobia, and from whom the salivary mucus had been taken for the inoculation of rabbits, which proved that they had to deal with a virus that was transmissible, and could, so to speak, seed itself successively on a series of animals. He affirmed that microbes, cultivated unexposed to oxygen, became more and more virulent, whilst those exposed to oxygen became progressively attenuated. M. Pasteur's address had for its principal end the proof that there is in this fact a precise law which finds numerous applications. That which it is necessary to be assured of, is, that it is with the microbe of the virus that we have to deal, and that virus has not been preserved long enough; that another virus may be developed from it—that of septicæmia—which alone would suffice to cause death by inoculation, and occasion confusion in results. These experiences have been communicated to the Academy of Medicine, and confirmed by those of Dr. Maurice Regnault, repeated at the Hospital St. Eugene. From all these experiments carefully performed, the evidence results of the existence of a hydrophobic microbe. M. Pasteur then entered into the examination of an important question, viz.: to establish the connection of cause which exists between the presence of this microbe, and the development of rabies. At this time he answered the attacks that had been made on him by M. Koch and his disciples. He mentioned that several points in this paper were unpublished and novel, and made the observation that there was a parallelism between his experiences relative to the microbes of cholera of fowls and those relating to rabic virus. This microbe is found in the blood. Up to the present then, three very different and distinct microbes have been found: 1st, that of fowls; 2nd, that of charbon; 3rd, that of rabic saliva. But a fourth microbe has been recently found by M. Pasteur; which will confirm the general law, that which is developed in the epizootic of typhoid in horses, a scourge to which 1,500 horses of the Paris omnibuses have fallen victims. The virus of the nasal discharge communicated with its attendant microbe to rabbits, developed the same fever (typhoid) that can be established by the pathological characters that are found in ordinary typhoid. M. Pasteur, however, does

not commit himself to any positive dicta on the observations, not yet confirmed, between the microbe of this epizootic, and the development of the typhoid of the horse. After a series of gropings in the dark, to arrive at an attenuation that would suffice, he finished by obtaining a virus that would no longer produce typhoid, but which, on the contrary, would antagonise it. The speaker called to mind that we are now in the presence of a general law relative to inoculation, and to a general method for its application. These principles give us right to entertain the most legitimate hope for a new method of preservation. The Professor called to mind that the Minister of Agriculture in Prussia, notwithstanding contradictory writings, made haste in appointing a commission of competent men, charged to examine the question minutely, and, if possible, to arrive at a decision. The important conclusions of this commission have been published, but the speaker had not the time to give a recital to the audience. M. Pasteur related in detail the experiments made in Berlin on a great scale, by order of the superior authorities, with the tubes that he had sent them, in the presence of experts, and intermedial with his delegate, M. Thulier.

An important subject is that of the rôle played by earth worms ; the question was to know by what manner the contagion was communicated to animals brousing on grass growing over a place where the carcases of animals dead from charbon had been buried. The existence of the spores of charbon was established on the surface of this ground. After having examined in a state of solution in water the earth of this surface, it was possible to determine that it was the excrement of the worms which was the carrier of these virulent germs. Dr. Koch was taken to task by M. Pasteur for the scientific reproaches that he had levelled at him, and was invited by him, and the invitation extended to other opponents, if any were present, to take his place on the platform and state their views. M. Koch, being loudly called for, took his place at the platform and asked permission to speak, and in a few words in German reserved his defence for another occasion, not being desirous of entering into a discussion in a language that was not understood by all, and stated that he reserved his defence for publication in the scientific journals. Dr. Sermani, of Pavia, then read a succinct but comprehensive report on the experiments made in Italy for comparison with those of M. Pasteur, experiments which —although not absolutely conclusive—did not in any measure weaken the conclusions of M. Pasteur. Professeur Balesterri, of Genoa, stated his opinions on the subject, especially in his experience from a clinical point of view. In a loud voice and with much gesticulation he proclaimed his opinion that an exaggerated view was taken of microbes —as factors of disease—in the greater number of virulent affections. In the same manner he affirmed that the fish in the sea could not exist if there was not water in the sea. Equally microbes could not originate, be developed and live, but for the existence of a special nidus, which is the virulent liquid of each infectious disease. M. Layet, of Bordeaux, closed the debate by affirming the great importance from a hygienic point of view, and especially from a prophylactic which M. Pasteur's researches possess.

M. Lombard (the President of the Congress) before closing the sitting, affirmed the principle of strict impartiality that should govern all scientific questions, and he warmly thanked M. Koch for having raised a dissentient voice, for that it is in the shock of opinions that light, that is to say, truth results.

At half-past six in the evening the members of the International Congress were conveyed by omnibuses to the country residence of Professor De Candolle. The costumes of those Scientists and Doctors of Medicine were strikingly varied from the plain evening dress to brilliant uniforms, and lappels of the coats blazing with sparkling orders. But dress, according to the proverb, does not make the man, and to judge from the reception accorded to all by Messieurs and Madame De Candolle, the proverb was acceptable in this instance. This lovely country residence was brilliantly illuminated, but large as it was it proved too small for the numbers congregated; the overflow was therefore distributed in the Park—brilliantly illuminated with coloured lanterns—in which they thoroughly enjoyed the delightful evening air. At eight o'clock a splendid banquet was served. The ladies, as on the evening previous at the Foyers of the Grand Opera, were in a minority. Some of the German Professors made a calculation of how much they must economize in marks and pfennings to be enabled in their old age to

offer to a similar gathering receptions equal to those of their Geneva hosts, and arrived at the sorrowful conclusion that the Professors of the Empire could only arrive at such a result when each of the members had attained the age of Methuselah. During the whole evening the greatest animation and gaiety prevailed, thanks to the hospitality of the De Condolle family, and when at half-past ten the omnibuses and carriages bore away the guests, all were of opinion that they had been most sumptuously entertained by the representatives of a great name.

In the morning of this day the safety ladders in fires were exhibited. A very great number were on exhibition. The opinion of the large number gathered to witness the exhibition was conflicting. A specialist remarked that these ladders to be of real service must be frequently manœuvred.

THIRD DAY.

In the second section, that of Public Hygiene, presided over by M. Piachaud, Colonel Ziegler, the principal medical officer of the Swiss army, opened the debate by his report on the results of faultily conceived and badly made shoes, an important question not only from a hygienic point of view, but also for the military force of a country. He stated that the small Swiss army loses a large percentage of efficiency in the recruits in consequence of the deformity of the feet, caused by the faulty construction of the shoes, that this cause for complaint will cease when the shoemakers understand and properly practice their business. Let us commence by studying the normal form of the foot in the new born, and in those who walk barefooted. If we take an impression on the ground of a natural foot we behold the first principle, the most important of all. It is necessary that the prolonged axis of the great toe should pass by the centre of the heel. The foot is in reality a vault which is flattened and elevated at each step by the elasticity due to its admirable organic mechanism. The shoemaker as a rule but little acquainted with the anatomical form of the foot, fancies he imitates nature but is deceived. One of the greatest faults consists in not giving to the great toe sufficient freedom of lateral movement and to crushing it pitilessly outwards, that is to say to the side of the other toes. From that irritation or inflammation of the great toe arises, the nail acquires fleshy granulations, corns, ulcerations, and sometimes a veritable articular inflammation. But there is another serious evil which the speaker attributed essentially to the formation of the shoes. It is the development of flat-footedness, that is to say an abnormal state in which the vault of the foot disappears. Excessive weights carried at too early an age causing a relaxation of the aponeuroses, may also be fairly considered as causal, but faulty shoeing is principally concerned, and when we can accomplish an improved system, the very large number of men disabled by it in armies will disappear. The two shoes of a pair well made ought to touch at two points, the great toe and the heel. The shoes should be fifteen to twenty millimetres longer than the foot, on account of the normal elongation in walking. Thirdly, the shoe should reproduce the natural projections and hollows of the form of the foot. The Colonel passed on from these details to military shoe material and making. Should the soldiers wear shoes, half-boots or buskins, or long boots? In Italy and Germany alone is this made a subject for regulation. The practical conclusions of the paper for curative means, were, 1st, practical instruction given to military shoemakers; 2nd, obligation for a normal system in all military establishments dependent on Governments; 3rd, enforced concurrence, by the creation of a manufactory of shoes on physiological principles. M. Ziegler considers that such an enterprise would be a paying one.

Professor Roth, who has for a long time been engaged in the study of this question, exhibited shoes manufactured in London, which in reality are in agreement with the principles laid down by Col. Ziegler. These shoes are based on the rule that the interior border of the sole is a straight line, which in reality approaches to the rule indicated by Colonel Ziegler.

After these interesting remarks by previous speakers introducing the subject, Dr. Jaeger entered into an examination, not of the form but of the material employed for shoes, and affirmed that the leather we employed had a bad effect on the feet. He repudiated tanned leather and every variety of blacking, and recommended especially wool-

len, felt, and deer skin, exhibiting specimens which appeared very reasonable. More than two hundred persons who had followed his advice made the ascent of the Swiss mountains without inconvenience. A long discussion ensued between many of the assembled delegates on the question of whether it is truly the present form of shoes that is the general cause of deformity, particularly of flat-footedness.

M. Vallin, Deputy from the Ministry of War in France, and Professor of Hygiene at Val de Grace, admitted that in France the form of shoes is very bad, and that from this discussion his country might derive profit. He recognized also that from this cause all feet are more or less deformed. It was necessary to distinguish among other things the form of shoe of the Parisian gentleman and Parisian lady, that of the latter being essentially (with the high heels) bad and anti-hygienic. Dr. Gosse mentioned that to some extent the shape of the foot would be dependent on race.

Replying to his interlocutors M. Ziegler deplored that fashion should govern so much in this as in other matters—that the husband should be so much under the slipper of the wife.

In the afternoon the general sitting of the Congress was opened by a discourse from M. Corradi, of Pavia, on the question of *Phthisis Pulmonalis*. Formerly there existed in Italy a legitimate terror on the contagion of Phthisis, and everything was destroyed that had been used by the patient. At the present time careful disinfection of everything and washing was relied upon. Reference was made to the special microbe of Phthisis. This microbe extracted from the sputa of patients suffering from the disease, was reproduced by culture and propagated by inoculation. Professor Corradi proposed the prevention of cohabitation with the phthisical; the abstaining from food derived from phthisical sources, including milk; to avoid the use of vaccinia from phthisical heifers and infants, and to institute special hospitals for the isolation and treatment of phthisical cases.

M. Lendet, of Rouen Hospital, read a paper of a clinical character relative to its contagion, in which he expressed the opinions resulting from his observations derived from fifty-six households, that a husband communicates more frequently the disease to the wife than the wife to the husband. One of the consequences that the speaker drew from his experience was that marriage between a tuberculous and healthy person should be strongly protested against.

M. Vallin was of opinion that science is not yet sufficiently advanced on the question of contagion of Phthisis to require at present the establishment of hospitals *ad hoc* for consumptives, as for other contagious maladies, such as smallpox, etc., etc., and was of the opinion that for the present all prophylactic ordinances would be premature.

M. Adolphe Smith, the special correspondent of the London Lancet, enquired of the Congress whether a great number of cases of Phthisis in cities could not be attributed to the drains as sources of the tubercular microbi, also in general to all anti-hygienic waters which are used by large populations, to imperfect sewerage, disposal of sewage, and general faulty drainage. I omit the discussion on M. A. Smith's views which were generally concurred in and pass on to another very interesting question which recently in Germany, Switzerland, England and the United States has occupied not only the minds of the benevolent, but has also had satisfactory realizations of the correctness of the remedial views entertained—namely the taking of weak and sickly school children into the country during the holidays. To this question M. Varrentrap universally known as a scientist and philanthrophist has devoted long years of his life, as also to the study of the most important practical questions of hygiene. For some years past M. Varrentrap has been engaged in contriving means for offering to children sanitary aids by removal to the country during their holidays. Children between eight and fourteen years, of parents honest but in poor circumstances who had been educated in the schools of large cities were carried out into the country to the most healthy and agreeable localities that could be chosen, there to spend their holidays, with the object in view of re-establishing their health and strength under hygienic influences. At these places the most satisfactory observations have been made, young girls who up to that time had been brought up to a dread of water in the course of a few days had become delighted with to them this

novel regime. M. Varrentrap entered into the technical and statistical points of the question. The children were weighed and measured on their departure, as they had been on their return home, and as means of comparison the tables of Quetlet were employed. But the investigators did not confine themselves to making on these young children scientific hygienic observations, this agreeable parenthesis in school life had for the children most excellent moral advantages, they became accustomed to order, to cleanliness, to the mending of their own clothes, often in a very bad condition, and from the time of leaving their homes their rude manners gave place to civility and politeness. They learnt to render aid to each other and attached themselves cordially to their teachers who were those they frequently had over them at the schools. In Denmark alone they have thus placed seven thousand children, who remarkable to relate, found a generous and gratuitous hospitality in the country. M. Varrentrap passed in review different countries particularly Berne, the capital of Switzerland. It was to the Pastor Pion, of Zurich, who at that time occupied a pleasant curacy at Trozen to whom the first idea of this philanthropic work occurred, and in 1878 M. Varrentrap inspirited at the success of this first attempt applied it on a larger scale, commencing by circulating in immense numbers, pamphlets on the subject, and subsequently holding public meetings. The result has been that twenty-two cities in Germany have imitated this noble example, many in Switzerland, also in the cities of Pesth and Milan. Up to the present the cost of each pupil has been two francs, 50 cents a day, everything included. It is thus that a total in Germany for the last six years of six thousand children have been benefitted by this excellent institution. M. Varrentrap finished his paper by a detail of the physical results obtained and establishes from a physiological point of view an immense augmentation of weight and height which has shown after repeated examinations sometime after the children had been in the country, that there plainly had been a durable benefit. Experiment had even been pushed as far as the measuring of the augmentation of the pulmonary capacity by the spirometer. A delegate from France warmly thanked the illustrious doctor for his instructive communication which France would be glad to imitate.

At five o'clock, at the Hygienic Exhibition, M. Appia demonstrated the objects on view belonging to the Order of the Red Cross. The members of the Congress then visited the hydrotherapeutic establishment of Champel Sur Arve, where a splendid collation and charming concert awaited them. This *fête champêtre* was an agreeable change from the grandeur of the receptions of the two preceding evenings. The whole of the next day was devoted to the excursion in the splendid saloon steamer, the *Mont Blanc*, on Lake Leman. The luncheon at Evian Les Bains, on the French side of the lake, was a most agreeable interlude to the grand reception that awaited us at the Kursaalat Montreux. M. Verney, President of the Council of State of the Canton de Vaud, welcomed the members of the Congress. Many speeches were made by notabilities from different countries. After the banquet a magnificent illumination of the Gulf of Montreux and Bay of Clarens, extending to Vevay, with festoons of Chinese lamps uninterrupted from Vevay to Villeneuve; churches, hotels and residences up the slopes of the mountain, brilliantly illuminated by strontium and other coloured lights, made altogether an unprecedented and fairy-like scene.

Fifth Session.

Friday, 8th of September.

The Congress assembled at 8 o'clock in the morning, a considerable number of the members assembling to examine the delicate and ingenious spirograph of Dr. Marey, of London, leaving with regret at nine o'clock to attend their various sections. In the first section, General Hygiene, the important question of alcoholism was discussed, occupying all the morning without tiring for a single instant the interest of the auditors. The second section—Public Hygiene—after a long discussion, pronounced in favour of cremation, and afterwards listened to several communications on the mortality of Armies, Barracks and Hospitals.

A large part of the time of the third section was employed in the termination of the discussion of the question of Sewers and Sewerage. The same question was made at

five o'clock p.m., the subject of a conference with Mr. Durand Claye at the Exhibition of Plain Palais. The sitting was terminated by a report from Mr. Colladon on the procedures for rendering tunnels, of great extent and completely shut up from external air during the period of construction, more healthy. Hydrophobia formed the principal subject of discussion of the fourth section, and gave rise to a most animated and interesting debate. The fifth section of Demography or statistics, treated on a number of questions, which, although possibly from a certain point of view less interesting than the preceding ones, were nevertheless of immense importance, as statistics form the basis of true Hygiene.

The afternoon session had in addition to the large number of members daily attracted to it a large number present of persons desirous of hearing M. Paul Bert. This illustrious member of our profession, being invited to take a seat on the platform, was received with prolonged cheering.

Dr. F. Formento, of New Orleans, one of the Vice-presidents of the Congress, was reqested to take the Presidential Chair.

At this general meeting held in the afternoon, M. Lombard, the celebrated M. Paul Bert, member of M. Gambetta's cabinet, and M. Marcet, member of the Royal Society, were the principal speakers. Subject of discussion, "Influence of altitude on health." M. Lombard, President of the Congress, entered on it by reading a paper which condensed the work on this subject, that for years he has been engaged in. He distinguished from a hygienic point of view moderate altitudes that is to say from between 500 and 1,000 metres, or 3,000 to 5,000 feet from those that exceed these figures, a difference that has an important influence on health.

At these heights, he states: 1st. Respiration is more frequent and prolonged, especially at the apices of the lungs. 2nd. Circulation more rapid, and as a consequence, the whole surface of the body more coloured. 3rd. Assimilation is more active at the expense of the fat and to the profit of the muscular system. Notwithstanding the diminution of the oxygen by the rarefaction of the air, it evidently results that moderate heights exercise a most beneficial action, and to some extent a regenerative action on all the functions, and in particular do not produce the anæmia, which is the dominating result of very high altitudes; but the question which he considered most important to bring before his scientific audience was the prophylactic and curative influence of moderate altitudes, 500 to 100 metres or 3,000 to 5,000 feet, on the development of Pulmonary Phthisis, from this point of view. The experiences of the speaker gathered in Europe and America are absolutely conclusive. M. Lombard enlarged particularly on the Engadine (Swiss) and especially on Davos, 1,556 metres. These stations have as an essential character a dry air, absence of fog, remarkable clearness of atmosphere, abundance of sun and lowest degree of cold—or 6 of Fahrenheit, which nevertheless the patients bear well. Hundreds of patients have been benefited—one doctor was completely cured at Davos, where he has been settled for 18 years. M. Lombard has ausculated him and has established the cure by pulmonary cicatrices. The Engadine in truth is, as is known, the highest valley in Europe, characterized by conditions now mentioned, and where splendid hotels are to be found for invalids. M. Lombard stated that he could recommend this mountain top with entire confidence. Another analogous sanitary region is to be found on the slopes of the Rocky mountains, in North America, the principal station of which is Denver City, over 3,000 feet altitude.

Here again the climate is characterized by dryness, absence of fog, perfect clearness of atmosphere rarefication of air which acts preventively in the first inflammatory period of phthisis. As regards the high altitudes, that is to say, those which exceed 2,000 metres or 10,000 feet, there is to be found no sanitorium in Europe, unless in that connection may be named the Hospices of the Grand and Petit Saint Bernard, also that of St. Gothard. But it is in Asia, particularly in the East Indies, that these sanitoria are to be found at similar heights, the highest of which (4,500 metres) on the slopes of the Himalaya, attain nearly that of Mont Blanc, which is 4,800 metres. All these localities present, as is well known, valuable resources for Europeans weakened by the climate of India. M. Lombard also spoke of the Island of Ceylon and of North and South America, both rich in sanatoria, especially with regard to the prophylaxis of tuberculosis.

M. Lombard had charge of a watchmaker, of Neufchatel, threatened with phthisis, who went to Panama from thence to Quito where he obtained a cure, and then returned to Panama where shortly after he relapsed, from thence he proceeded to Arequipa, where he again was apparently cured, and fancied that he could return to his favourite Neufchatel, but again became phthisical and died. The above is merely an epitome of M. Lombard's paper.

M. Paul Bert then, on rising, thanked the audience for their enthusiastic reception, and the President for his excellent paper, and stated that he felt some embarrassment in discharging the work allotted to him. When you are called on to follow a previous speaker it is usually to refute his views. Whilst I am obliged to declare while declining my competence for offering opinions on purely medical subjects that I am fully in accord with the previous speaker. What should I do? I can only address you briefly on the physiological experiments that I have made in my laboratory, in order to solve the difficult problem of the influence of altitudes on the organism. From our experiments especially with the air pump, we have arrived at a solution, I hope, of the questions on which travellers have lost themselves in hypothesis. It was incumbent on me to explain the action of gases on the pulmonary functions and by it on the composition of the blood. The influence of altitudes was then nothing more than a particular case in a general question. It was necessary to commence with the putting aside all mechanical explanations by which there had been attempts at explaining the different actions of altitude on the human body, and in particular to renounce atmospheric pressure, by which it was sought to explain everything, and equally hœmorrhages and all the symptoms of mountain trouble. Well! What did I do? I commenced by submitting myself to a high atmospheric pressure by artificial means, which after the accepted theory, should have crushed me (in fact the physiologist should always commence by the exposure of his own person, it is his duty, his privilege); well, I was not crushed at all. The explanation is simple; there is in the blood oxygen and carbonic acid, united with the colouring matter under the name of hœmoglobine. It has been believed, up to the present, that this union was a chemical combination very intimate, and that as the diminution of atmospheric pressure diminishes, the hœmoglobine progressively abandons the oxygen with which it was united, the blood becomes impoverished, and you enter on a state of asphyxia, and we are now in the presence of symptoms that are observed with the diminution of atmospheric pressure of altitudes.

What conclusion are we to arrive at, if it is not that we have at the same time with the evil found the remedy. When the rarefaction of the air has produced its formidable effects, if my explanation is correct, we have nothing else to do to combat them than to supply the patient with oxygen and he should be cured. In exposing myself and some others of their own free will in a closed chamber with progressive augmentation or exhaustion we have arrived at the mountain trouble, *i.e.* malaise, acceleration of the pulse and of respirations, pain in the head, involuntary tremors, increased sensibility, then deadened sensibility, somnolence and partial loss of reason. Shall I say it? Having counted my pulse for a third of a minute, my consciousness was not sufficient to multiply the number by three, and I had to place on my notes—too difficult. We then commenced respiring from a bag full of air abounding in oxygen; immediately and as by enchantment, all the symptoms ceased, we recovered our senses, the pulsations of the heart became normal, and the respirations less frequent. This was for us an encouraging experience, particularly also from the point of view of the speedy relief that aerial ascensionists can always be provided with.

Two courageous aeronauts made the experiment, when one of the two, becoming of a violet colour with the ears and lips black, had time to place to his mouth the tube of deliverance in connection with a bag full of oxygen, and experienced instant relief. The other experimenter had become absolutely blind, could no longer see his paper, the saving tube restored his sight. In one of the subsequent ascents to the height of 7,300 metres the aeronaut perished in consequence of not having taken a sufficient quantity of oxygen for overcoming the rarefaction of the air. That which we have then said of aeronauts will apply equally to mountain climbers; it suffices for overcoming all the train of symptoms mentioned to carry with them a bag of oxygen gas or the ingredients

necessary for making it. The speaker then endorsed in a few words the statements of Dr. Lombard concerning the therapeutic action of medium altitudes.

He then entered into the question of the physiological process by which persons accustom themselves progressively to live in altitudes which at first appeared quite unsupportable; and especially that the generation following, run perfectly at their ease, where new comers are attacked with all the symptoms just now mentioned, and can with difficulty move. The fact may be explained in different manners. It may be supposed that the acclimatized man has learnt to make a better use of his strength, and that the oxygen insufficient for the new comer suffices for him. Or we may have recourse to the thoracic enlargement which evidently results from a prolonged sojourn at great altitudes, such as the particular mountains in India. The largeness of the lungs of the Indian mountaineers supplies in their case an equivalent for the diminution of oxygen. Perhaps also a more normal harmony has been entered into between nutrition, and by the vital combustion perhaps we consume more, ordinarily, then is requisite. But there is another explanation which appears to me more plausible. It may be that in the case of those Indians who run so easily on the tops of the Himalayas, their blood may in time have become capable of absorbing a larger quantity of oxygen than that of other people.

We have discovered that in the dog in the normal state, one hundred parts ought to contain one of oxygen.

Dr. Gillet, of Bordeaux, has made a singular discovery, viz.: That blood out of the circulation on being shaken can absorb as much again of oxygen. I have succeded in procuring the blood of the llama and a remarkable circumstance is that it contained more oxygen than in experiments made in lower regions. How then can we conclude otherwise than that the work of acclimatization is any thing else than the blood becoming accustomed to absorb with the same volume a larger quantity of oxygen. Astronomers frighten us much concerning the central fire of our globe which is becoming cooler, and our atmosphere becoming more rarefied. The theory without doubt is accurate, but I have a consolation to offer you—our organisms may during a certain space of time accustom themselves to a rarefied atmosphere because their hœmoglobin will become capable of absorbing a larger quantity of oxygen, notwithstanding the diminution of the atmospheric pressure. I am very glad, gentlemen, to be able to close with this consolation derived from experimental physiology! Prolonged applause.

At the general meeting of Saturday the Prevalence of Blindness was the subject of debate; opening paper read by Dr. Halkenkoff, followed by Dr. Roth. Then came the farewell speeches, votes of thanks, and finally the resolution carried in response to a cordial invitation to hold the next International Sanitary Congress at La Haye (The Hague) in 1884. Communications relating to it, are to be addressed to Dr. VanOverbeck De Meyer, Professor of Hygiene at the University of Utrecht, Holland. The farewell banquet was largely attended. I have of course only attempted a very brief sketch of the interesting proceedings of this Congress, and in conclusion desire to express my thanks for the many courtesies received as the representative of Canada.

C. W. Coverton,
Delegate.

Article IV.

REPORT OF THE COMMITTEE APPOINTED TO ATTEND THE SANITARY CONVENTION AT GREENVILLE, TO VISIT THE OFFICES OF THE STATE BOARD OF HEALTH OF MICHIGAN, AND THE HEALTH DEPARTMENTS OF DETROIT AND TOLEDO.

To the Members of the Provincial Board of Health of Ontario:—

Gentlemen,—As the result of a conference with the Hon. A. S. Hardy, Provincial Secretary, it was decided that it would be advisable in view of the organization of this

Board that some of its members should attend the Sanitary Convention then about to be held at Greenville, Michigan, on the 11th and 12th of April, and should visit the offices and enquire into the workings of the Board of Health of that State; and the undersigned were appointed as a Committee of your Board for that object.

While travelling towards our destination we were fortunate in making the acquaintance of Dr. H. B. Baker, Secretary of the State Board of Health of Michigan, and his principal assistant, Mr. J. K. Allen, both of Lansing. After our arrival we were introduced by these gentlemen to Dr. Avery, of Greenville, Dr. Hazlewood, of Grand Rapids, Dr. Kellogg, of Battle Creek, and Rev. D. C. Jacokes, of Pontiac, all members of the Board. These gentlemen politely invited us to be present at the regular quarterly meeting of their Board, which was to take place on the morning of the 11th. This invitation was peculiarly acceptable to your Committee, as it gave us an opportunity of familiarizing ourselves with some of the special work of the Board.

The Convention, pursuant to call, assembled in the Congregational Church at two p.m., April 11th, Rev. J. S. Patton acting as Chairman, and Dr. Chas. Sheldon as Secretary. By a reference to the following copy of the programme, it will be seen that these conventions are conducted under the superintendence of a joint Committee of Members of the State Board and of citizens of the place in which the Convention is to be held:—

Program of the Sanitary Convention to be held at the Congregational Church, Greenville, Michigan, Tuesday and Wednesday, April 11th and 12th, 1882.

First Session, Tuesday, April 11th, at 2 p.m.

1. Convention called to order by the Secretary.
2. Prayer. By Rev. Jay Huntington, of Greenville.
3. Address of Welcome. By Hon. Rufus F. Sprague, Mayor of the City.
4. Introductory Remarks; Statement of Purposes of Convention. By John Avery, M.D., Member of State Board of Health.
5. Address: Obstacles to Sanitary Reform. By Rev. J. L. Patton, of Greenville, President of the Convention.
6. A Paper: The Water Supply of Greenville, Present and Prospective. By James Mulhern, M.D., Health Officer of Greenville.
7. Discussion of the Subject.
8. A Paper: The Relation of the Newspaper Press to Sanitary Reform. By E. F. Grabill, Editor of the *Greenville Independent*.
9. Discussion of the Subject.
10. A Paper: Muscular Hygiene. By D. A. McLean, M.D., Health Officer of Stanton.
11. Discussion of the Subject.

Second Session, Tuesday Evening, April 11th, at 7:30.

1. Reading Minutes of Previous Session.
2. A Paper: The Prevention and Restriction of Diphtheria and Scarlet Fever. By Arthur Hazelwood, M.D., of Grand Rapids, Member of the State Board of Health.
3. Discussion of the Subject.
4. A Paper: How Can We Obtain and Preserve the Best Eyesight and Hearing? By Leartus Connor, A.M., M.D., of Detroit.
5. Discussion of the Subject.
6. An Address: Pure Air; Why we should have it, and how we shall get it. By Rev. D. C. Jacokes, D.D., of Pontiac, Member of the State Board of Health.
7. Discussion: Five minute Speeches on the Subject of Ventilation.
8. Appointment of Committee.

Third Session, Wednesday, April 12th, at 9:30 a.m.

1. Reading of Minutes of Previous Session.
2. Prayer. By Rev. A. A. Brown, of Greenville.

3. A Paper: Effect on Public Health of Overflowed Lands adjacent to Maple River. By S. E. Gillam, M.D., Health Officer of St. John's.
4. Discussion: Five minute Speeches.
5. A Paper: Vaccination—Jenner *versus* Bergh. By Charles M. Martin, M.D., of Greenville.
6. Discussion of the Subject.
7. A Paper: High Pressure *versus* Hygiene in our Public Schools. By Rev. M. W. Fairfield, of Muskegon.
8. Discussion: Five-minute Speeches.
9. A Paper: Food Adulterations. By Prof. A. B. Prescott, M.D., F.C.S., of Ann Arbor.
10. General Discusssion.

Fourth Session, Wednesday, April 12th, at 2:30 p.m.

1. Reading of Minutes of Previous Session.
2. A Paper: Prenatal Exhaustion. By Frank K. Owen, M.D., of Ypsilanti.
3. Discussion of the Subject.
4. A Paper: Sewerage of the City of Greenville. By O. G. Fox, of Greenville.
5. Discussion of the Subject—Five-minute Speeches.
6. A Paper: School Hygiene. By Prof. E. P. Church, of Greenville.
7. Discussion of the Subject.
8. A Paper: Meat. By Prof. V. C. Vaughan, M.D., Ph.D., of Ann Arbor.
9. Discussion.

Fifth Session, Wednesday Evening, April 12th, at 7:30.

1. Reading of Minutes of Previous Session.
2. Prayer. By Rev. E. W. Flower, of Greenville.
3. Miscellaneous Business, Reports of Committees, Resolutions, etc.
4. A Paper: The Disposal of Decomposing Organic Matter. By J. H. Kellogg, M.D., of Battle Creek, Member of the State Board of Health.
5. Discussion of the Subject.
6. A Paper: Relation of the Church to Sanitary Reform. By Lemuel Clute, Esq., of Ionia.
7. Discussion of the Subject.
8. A Paper: The Enforcement of Sanitary Regulations. By Hon H. H. Holt, of Muskegon.
9. General Discussion.
10. Closing of the Convention.

The first three addresses, by Hon. R. F. Sprague, Mayor of Greenville, Dr. John Avery, a member of the State Board of Health, and Rev. J. L. Patton, Chairman of the Convention, did not deal with any special subjects necessary to be reported to you in detail, but were eloquent and effective introductions to the work of the Convention, pointing out its objects, and impressing upon the audience the important bearing which the labours of Sanitarians have or should have upon the well-being of humanity at large.

"The Water Supply of Greenville, Present and Prospective,"

was a topic discussed by Dr. J. Mulhern. Wells are the main sources of water depended upon in Greenville for drinking and cooking purposes. The nature of the soil in this city is gravelly or of a sandy nature, and is favourable for the conveyance of pernicious substances from the surface of the ground to the water of wells. The elements that principally contaminate our water are decomposing vegetables and human and animal excreta, the drainage from which pollutes it and poisons our systems. Many wells are

in proximity to barn-yards, water-closets and privy-vaults; there is no full security in cement wells. The city could be supplied by water from the great springs on the farm of E. B. Edwards east of the railroad station.

The discussion on this subject was protracted and participated in by Drs. Kellogg, Connor, Oldright, Jacokes, Martin, Hazlewood, and Messrs. C. C. Ellsworth, James Satterlee and T. VanHorn. It was affirmed that water from wells is almost universally impure because a well, no matter how carefully curbed, is in fact a reservior into which poisonous matter may filtrate through any depth of earth; and that poison in cess-pools, privy vaults, or any decaying animal or vegetable matter on the surface of the ground adjacent to the well, is pretty sure to find its way into the water of the well. Numerous cases of poisoning from wells were given in which the water, though apparently pure, was chemically analyzed and its poisonous qualities detected and exposed. The moral is obvious: If you have a well, on the ground about it, or on the ground within a large radius around it, permit no cess-pool, privy vault or any other reservoir of poison which may soak through the ground into the well.

In the discussion on this subject it was pretty generally conceded that two notions often entertained are false and mischievous. First, the widely prevalent notion that the earth will remove all impurities of water which drains through it. Secondly, that filters render bad water comparatively safe. It was stated that filters, especially after being in use a little time, remove only suspended matter and not any of the dissolved impurities or minute germs of disease. After long continued use, without change of contents, they rather deteriorate the water by the decomposing organic matter detained in their meshes. Dr. Oldright referred to an example of this in the so-called "filtering basin" dug in the sand of Toronto Island, which had, after a time, rendered the comparatively pure water of the lake passing through it so impure that the basin had to be abandoned. To be of use filters should be often refilled; and it is good to give them a rest, having more than one, so as to give an opportunity for absorption of air. Sand, gravel, and charcoal were said to be good materials. A large flower pot can be utilized for the purpose.

The question was asked by Dr. Charles S. Sheldon: "How near to cess-pools is it safe to dig wells?" Dr. Jacokes replied: "Most wells will drain a territory of about two hundred yards, some a larger surface. It depends on the character of the soil. By all means do away with the horrible vaults and slop receptacles, which are such breeders of disease. Better carry dish water clear out of town than suffer wells to be contaminated by it." He recommended dry earth closets.

"The Relation of the Newspaper Press to Sanitary Reform,"

was a brief paper by E. F. Grabill of the Greenville *Independent*, which gave a few hints how sanitary reformers can best secure and retain hold of public attention. Pungent paragraphs, the speaker remarked, will best secure public attention. People will not read long essays; even if they had the inclination they have not the time. Sanitary theorizing in newspapers is of no avail; people want facts and they will make for themselves deductions sufficiently correct for practical use. Facts inserted with personal interest most readily secure attention—people like to hear about people. Facts published when they are fresh and applicable to some present condition of things are sure to receive attention. Articles should never be expressed in too scientific language, but should always be written in the simplest of words and in the simplest of sentences.

The closing paper of the first session was by Dr. D. A. McLean, of Stanton, on

"Muscular Hygiene."

The doctor seriously doubted whether the mental labour required of children in our schools is ever so severe as to injure them physically, provided physical culture is carried, as it should be, along with the mental. The great fault of school exercise is that those who need it are just the ones who do not take it, and this is especially true of the girls. Climbing stairs is very injurious to girls in their teens, and yet, if proper

attention were paid to the development of the muscular system, we should hear little of this evil.

Nobody will dispute that a strong, well-developed, robust body is a great desideratum. It is well known that the staying effect, or ability for continued work is directly in proportion to size. Where a well-developed body is not already possessed, it may be secured by regular and persistent muscular exercise, as is witnessed in the training of athletes. By all means let us have more physiology taught in our schools, but let us not forget that it is far better to have physiology *acted*. Ten minutes of vigorous exercise a day is better for children than whole hours spent in the study of physiology. Bodily vigour is a prime necessity. It is coming to be understood that unsound bodies, unsound minds and unsound morals are closely linked together. He could not recommend walking too strongly. Women are very negligent of this health-giving exercise, frequently not going beyond the housedoor for days together. He advised daily walks in the open air. The literature of this subject should be studied. He wished he could put into the hands of every man, woman and child in the whole land Dr. Blackie's admirable little book "How to get strong," published by Harper Bros., New York.

"The Prevention and Restriction of Diphtheria and Scarlet Fever,"

was a very interesting paper by Dr. Hazlewood, of Grand Rapids. He showed by compiled statistics that the death rate of smallpox, compared with diphtheria and scarlet fever, is exceedingly small, although people are afraid of and defend themselves against smallpox, while they take few precautions or none against the introduction of diphtheria and scarlet fever, and make little effort to prevent their spread.

In illustration he gave the following tables of the comparative mortality of smallpox, scarlet fever and diphtheria in three States for five years, ending with the year 1879:

	Year.	Small-pox.	Scarlet Fever.	Diphtheria.
Michigan	1875	65	423	207
	1876	76	389	311
	1877	102	404	593
	1878	6	429	877
	1879	6	418	1473
Minnesota	1875	0	216	226
	1876	0	316	379
	1877	2	317	370
	1878	7	199	658
	1879	0	225	951
New York	1875	0	514	329
	1876	0	891	1750
	1877	0	983	951
	1878	0	1099	1907
	1879	0	1477	671

It will be seen from this tabulated statement that mortality from smallpox in this country is trifling in comparison with the annual death rate from scarlet fever and diphtheria. And yet despite such an array of statistics, people are greatly alarmed at the approach of smallpox, while they give but comparatively little attention to the ravages of the latter diseases, and take no active measures looking toward their prevention and restriction. The largest number of deaths from any one disease in Minnesota in 1879 was from diphtheria.

Both diseases are contagious. The speaker cited many examples conclusively proving this. Diphtheria under certain conditions may be readily communicated from person to person, and even from cats to persons. A case of malignant diphtheria is

like a house on fire, the destructive flame must be extinguished as speedily as possible. Scarlet fever is more generally recognized as communicable and probably is so. It may be carried in garments, in milk, and in various other ways. There is danger from scarlet fever patients *so long as there is any peeling of the skin.*

"How can we Obtain and Preserve the best Eyesight and Hearing?"

was the title of a paper presented by Dr. Leartus Connor of Detroit. He first exhibited a number of large coloured diagrams showing the construction of the eye and ear. Then he followed with a statement of the value of sight and hearing, and advice as to the care of eye and ear. Amongst his recommendations were the following:—Never use the eye or ear when use causes pain in either organ or in the head; do not use the eye for close work before breakfast, or in imperfect light, as in twilight, far from the window on a dark day; keep out of the external ear all instruments; insert nothing larger than the little finger, and put nothing in stiffer than a damp towel or a handkerchief; keep out of the ear all oils, all soaps, all cold water, and everything else that might injure a most delicately constructed and sensitive organ; never put a poultice to the ear unless advised by a surgeon to do so; running ears should at once be attended to by a competent practitioner; bear in mind constantly that we do not see with the eye nor hear with the ear, but with the brain, hence do not lay tasks upon either eye or ear when the brain is in an exhausted state.

Dr. S. E. Gillam, Health Officer of St. John's, read a paper on

"Effect on Public Health of Overflowed Lands adjacent to Maple River."

According to his account Maple River was by nature a healthy stream; it had a good inclination and people along its banks were ordinarily healthful. Thus it was until 1840, when people began to dam the stream. Flats were overflowed on either side to a great distance; the Maple Rapids dam caused the overflow of bottom lands to the extent of two thousand acres or more in low water, the water backing up for a distance of ten miles, making a wreck of a belt of land on either side from one fourth to a mile in width through the townships of Fulton and Washington; and the overflow extends into Elba and Duplain. The river bed, because the current was stopped, became filled with filth and debris from above. Vegetation was entirely destroyed, the surface of the ground, on account of its saturated condition, being of the consistency of thick mush. When fall rains set in lands more distant become overflowed, in which condition they remain until the next spring. The high water flow is estimated at from six thousand to eight thousand acres of valuable land, rendered for several months of each year unfit for use. This might be drained, as a competent survey shows that the fall in Maple River, between Maple Rapids and Bridgeville, is 7.66 feet. Bad River, running into the Saginaw valley, also has its banks overflowed by the dams in Maple River. From observations made by reputable physicians, the overflowed lands have been and are a fruitful source of disease. The miasma emitted therefrom during the summer and fall months causes a large percentage of the sickness of the region. Fever and ague, dysentery, typho-malarial and remittent fevers, pneumonia, rheumatism and neuralgia, as a rule, have always been greater in per cent. and more malignant in type in regions overflowed by this standing water than on higher lands with natural drainage. Diagrams were used to show the relative healthfulness of overflowed lands with the lands not overflowed, the percentage of sickness and death being the test. Numerous reports of health officers read to the convention sustained the position of Dr. Gillam. The paper was of much interest because of its enunciation of principles which may apply equally to all overflowed lands.

"Vaccination: Jenner versus Bergh,"

was the title of a paper by Dr. C. M. Martin, of Greenville. This excellent paper reviewed the article of Bergh in the *North American Review* for February, in which Bergh takes issue with the experience of mankind and the observations of distinguished

physicians since the introduction of vaccination into use in 1776. Bergh characterizes vaccination as a "hideous monstrosity," and says all sorts of bad things about it. Dr. Martin gave copious statistics to prove his ably sustained position that vaccination is one of the greatest preventatives of disease ever discovered. In the article the views sustained by the best authorities on vaccination were comprehensively stated and light thrown upon some points in regard to it which are matters of daily enquiry among the people. For instance, the question is frequently asked, How often is vaccination necessary? It is answered, that the best evidence is to the effect that to secure perfect protection it should be repeated at intervals of eight to twelve years throughout life. The claim by some that there is great danger of introducing blood diseases into the system was discussed and shown to be fallacious in the vast majority of instances, and Dr. Martin maintained that all danger would be averted if cow pox virus only were used, and that if people would insist that physicians should use no other, there would be no trouble from this source. The value placed upon vaccination by life insurance companies was adverted to. These companies do not ask the question, Have you successfully avoided the contaminating and poisonous operation of vaccination? But, Have you been successfully vaccinated? is the question asked by the medical examiner of the applicant for life insurance—a negative reply being considered sufficient reason to render the risk unsafe and to bar him from the benefits of insurance. The matter of compulsory vaccination was alluded to; while the writer did not advocate it, he gave some excellent reasons in its favour. Its propriety in this country, at least, is an open question. It savours too much of despotism to accord with American ideas of personal liberty.

"High Pressure versus Hygiene in our Public Schools,"

by Rev. M. W. Fairfield, of Muskegon, was a strong argument, ably supported by cited facts, showing that the number of studies each student is required to carry at a time is too large; the number of hours of study, in school and out, in order to commit and recite such lessons is too great; ill-ventilated school houses, and school houses with numerous stairs, are destructive of human life. These and other evils call for sanitary reform in the construction of school buildings and in programmes of study.

"Food Adulterations,"

by Professor A. B. Prescott, of Ann Arbor, was a paper which showed that much of food is not what we think it to be. He instanced glucose sugar and grape sugar, oleomargarine, P. D. spices, coffee, terra alba in cream of tartar, etc. He thinks legislation should demand that these things should appear in the markets under their real names or should be prohibited from sale. Dr. Avery related that a package of sugar labelled "pure Michigan maple syrup," sold by a Chicago firm wholesale and retailed in Greenville, analyzed by a competent chemist, was found to be one-eighth maple sugar to seven-eighths corn glucose. Rev. M. W. Fairfield, of Muskegon, made a test of some coffee which he purchased of his grocer, who was positive it was pure coffee, for his wholesale dealer would not, could not, for he was so honourable, sell an adulterated article. Yet Mr. Fairfield showed that grocer, one of the best of his class, that his unadulterated coffee was one-half chicory.

"Sewerage of the City of Greenville,"

by O. G. Fox, was a paper of great value in statement of facts and in suggestions. It was shown that Greenville is a favourable location for an effective system of sewerage. The best kinds of sewer pipes were described. Every city needing sewerage should devise and plan for it a long time, and not construct at great expense something which it would soon discover was not what it should have.

"Pure Air: why we should have it, and how we should get it,"

was an interesting and instructive letter by the Rev. D. C. Jackokes, of Pontiac, of the State Board of Health. His advice was how to secure good ventilation in all buildings,

and to keep clean the environment of our dwellings. Learn the facts governing health and then rigidly apply such rules as will secure health. Secure constant circulation of pure air in your dwellings. Be careful to use no wall paper of poisonous colours—better have no wall paper at all. At any rate tear off wall paper from the wall frequently. Beware of impure cellars; do not permit vegetable growth in cellars; white-wash cellar walls at least once a year. Keep your physical system in full vigour so that it will resist the invasion of the infinitesimal disease germ creation that is lying in wait to take possession of and destroy it.

"School Hygiene,"

by Prof. E. P. Church, of Greenville, attracted close attention, especially his allusion to the culpable general neglect of the necessity of having a water closet in the best position and in the best condition to secure the freest possible use thereof by school children. On many school premises one may see a mean, dilapidated building, bearing all possible marks of disrespect and execration, remote from the school house, difficult of approach to sensitive pupils, at all seasons of the year on account of its publicity. In the winter the snow sifts in at numerous crevices; the northern blasts make it a veritable cave of the winds; in winter it is as comfortless as an iceberg; in summer as malodorous as tophet. This description applies chiefly to country school districts. But large towns and cities are culpable in neglecting to supply such water closets and privies as the necessities of health demand, to say nothing of decency. People are doing their children, especially their daughters, great harm in a system of unwise economy. Health is cheap, untidiness and filth are never economical. Our schools should each have a refectory, neat, retired and comfortable.

The first paper of the last session was read by Lemuel Clute, Esq., of Ionia, on

"The Relation of the Church to Sanitary Reform."

He thought it one of the duties of spiritual advisers to point out among their people the necessity for their attending to the health of their bodies, and to diffuse, when opportunity offers, such sanitary knowledge as they see needed for the welfare of their people. He referred to the abuses of tobacco and alcohol, and the example which Christian people might set in this direction, as well as in certain other respects.

Dr. J. H. Kellogg read a lengthy and important paper on

"The Destruction of Decomposing Organic Matter."

Noxious gases and disease germs are usually associated together. Disease germs may be present without any perceptible odour, but the converse is never true. The settler in a new country usually digs two holes in his yard; into one goes all the filth of the family, from the other comes the water they drink. Usually these holes are near each other and their contents mingle. In older countries he digs one hole for the water and two or three for his filth, the latter frequently surrounding the former. Do away with cess-pools, vaults, and similar sources of disease, and you will reduce diphtheria, scarlet fever, typhoid fever, etc., *two-thirds*. The doctor spoke at length of many sources of disease within the house, as neglected cellars, pantries, wood-boxes, carpets, wall-papers, the kitchen, sink, etc.

Decomposing saw-dust is a fertile source of disease. It is believed that the recent epidemic of diphtheria at Ludington, Mason county, originated in this way. Nearly every child in the city suffered the disease, and one-third of the children died.

The importance of the proper disposal of human excreta was next dwelt upon; and the use of dry earth in some form of closet or other contrivance. The disinfection of excreta, especially of patients suffering from infectious disease, was referred to. Experiments were performed showing the disinfecting qualities of copperas, potassium permanganate, etc. The faulty methods in which some disinfectants, such as chloride of lime, are used, was alluded to.

The speaker remarked that the great sanitary requisite was co-operation, and the chief obstacle is the apathy of the people. "Thou art thy brother's keeper" is strictly

true in a sanitary sense. A man may obey sanitary injunctions, but if his neighbours are negligent, his care may be all in vain, and the life and health of his family in as great jeopardy as they would be from his own neglect.

An interesting feature to the general audience in connection with this paper was the illustration on a screen, by means of a lantern, of bacteria and other minute forms of life.

The closing paper of the convention was by Hon. Henry H. Holt, of Muskegon, on

"Enforcement of Sanitary Regulations."

It was valuable as showing how the importance of sanitary regulations is appreciated by an increasing number of prominent men not members of the medical profession, and the views they entertertain as to the "liberty of the individual" to spread death and destruction among his fellow beings.

The members of your committee were asked to address the convention on some subject of sanitation, and in response one of us made some remarks on a subject connected with drainage, but as it is hoped that members of this Board will from time to time have opportunities of interchanging views with one another on this and other subjects, it is not necessary to occupy your time with a report of what was said by us.

We were most cordially invited to take part in the various discussions, and we embraced the opportunity to express at the same time our appreciation of the valuable labours of the Michigan Board; a sentiment in which we feel assured you will join with us.

A committee appointed by the chairman reported on the sanitary appliances exhibited, and another committee on general resolutions regarding a number of sanitary matters, the conduct of future conventions, etc. In connection with these Governor Jerome, Bishop Gillespie, Hon. H. H. Holt, and other gentlemen of influence, added to the importance and interest of the proceedings.

The value of such conventions in enlisting the sympathy and interest of the people, as well as in imparting information, is a fact so self apparent as to lead your Committee to recommend the holding of such meetings in various parts of this Province.

As already intimated your Committee was by invitation present at the

Quarterly Meeting of the State Board.

Certain subjects were discussed which will be of interest to you. One of these was the establishment of a system of Immigrant Inspection, and the adoption of means for preventing the spread of disease by means of immigrants. In this, it is the intention of the Board to seek the co operation of other States and of the Health authorities of Canada and its various Provinces. Another was the preparation of a circular for general distribution directing people what to do whilst "waiting for the doctor—cases of poisoning." A report was also presented on the Manx feeding-bottle, which has a leaden sinker covered with rubber, and which has caused lead poisoning amongst infants, and it was recommended that the maker be asked to remedy the defect.

A circular to Health Officers was considered and adopted.

Delegates were appointed to the meetings of the American Medical Association, the American Public Health Association, and others. The other matters before the Board at this meeting were chiefly of a routine character.

Your Committee returned to Lansing, in company with Dr. Baker, Mr. Allen and Professor Prescott, of Ann Arbor, and were invited to accompany these gentlemen to the

Agricultural College.

They had the pleasure of inspecting the Museum, Conservatories and Laboratories of that institution. The Chemical Laboratory of Professor Kedzie is very well and conveniently arranged. It is also provided with a large number of instruments, illustrations of the branches of Chemical Physics, more especially of electricity and magnetism.

Your Committee next proceeded to the

when the Secretary, Dr. H. B. Baker, and his chief Clerk, J. H. Allen, very kindly spent portions of two days in explaining to us the documents connected with the workings of the Board, and discussing many matters connected therewith. Dr. Nicholson also explained to us the method of compiling the weekly Disease Reports.

As the Secretary was good enough to furnish us with a copy of his late Report for each member of this Board, it will not be necessary for your Committee to go so fully into detail as it otherwise would.

Your Committee has also been supplied with copies of all the blank sheets, blank forms, circulars and other documents of the Board, and a classified list of these will be found appended to this Report.

The information obtained by an organized system within the State is mainly derived from three sources:—From the regular correspondents of the Board, from Health officers and other local authorities, and from reporters of disease. In addition to this, the law provides that the medical and other officers of mining companies, or of any other organized companies in the State, shall furnish to the State Board any information bearing upon public health. The third class above referred to is made up from the others; all Health Officers of cities (and these are medical practitioners) are required to send Disease Reports, and very many of the correspondents volunteer to do so. In this connection it must be stated that in Michigan the population required to make a city is not half that required in Ontario, and hence cities are very numerous. So that between volunteers and Health officers of cities a good staff of reporters is secured.

In addition to the weekly reports of diseases sent by Health officers of cities, all Health officers and Clerks of Local Boards of Health are required to report annually; and also to report from time to time cases of contagious diseases, and to report on any other matter of importance or interest—in connection with Public Health.

From the above it will be seen that the Health officers constitute an important factor in advancing science sanitary, as well as in imparting the benefits derived from the study and practical application of it.

And your Committee would recommend that strenuous efforts be made to secure the appointment by each municipality in Ontario, of a regularly organized Local Board of Health, with its Health officer, a medical man when practicable. This is the law in Michigan. In every municipality the Board must appoint a Health officer, and if a medical man is available the Health officer must be a medical man.

The correspondents are medical men of good standing and ability in various portions of the State, who are invited by the Board to fill the position, and, if they accept, are invested by a formal commission of the Board with the above title. Their functions are to report regarding anything in their respective districts that may have any bearing upon Public Health, or be of interest to the Board; the occurrence and causes of epidemics or endemics; meteorological, topographical, social, commercial, or other conditions affecting health. There are two subjects coming under the above enumeration on which most of them report regularly at stated periods. As before intimated most of them are included in the list of Weekly Reporters of Diseases; and about thirty of them are Regular Meteorological Observers, sending monthly reports of facts relating to temperature, humidity, barometric pressure, clouds, winds, rains, snow and ozone. The observations on which these reports are based are made three times a day (at 7 a.m., 2 p.m. and 9 p.m.), sometimes I suppose by some intelligent person as Deputy. The work of the correspondents and observers is done gratuitously, as is, I believe, the work of the observers connected with the meteorological service of Canada in outlying stations.

Our Board is fortunate in having the performance of this part of the work provided for, Mr. Carpmael, Superintendent of this Service, having kindly promised the Chairman to co-operate with the Board and furnish us with such information as we shall need. The plan for collecting disease reports is somewhat similiar to that with which most of the members of this Board are familiar as having been adopted by Mr. T. H. Monk, of Toronto, in the system carried on by him for a short period. The blanks for the weekly reports are printed on postal cards, which are distributed to the observers before referred to. A suppositious sample of one of these is here appended, and will explain itself:

DISEASES IN *Grand Rapids*, WEEK ENDING SATURDAY, 15TH APRIL, 1882.

No.		Prevalence. Order. See *a*.	Severity. See *b*.	Cases.
Ed. 18.	Brain, Inflammation of	.....	.....	0
	Bowels, Inflammation of	6	+	2
	Bronchitis	3	–	5
	Cerebro-spinal Meningitis	.....	.....	0
	Cholera Infantum	7	=	1
	Cholera Morbus	.....	.....	0
	Consumption, Pulmonary	7	=	1
	Croup, Membranous	5	–	3
	Diphtheria	7	–	1
	Diarrhœa	6	=	2
	Dysentery	6	=	2
	Erysipelas	.....	.....	0
	Fever, Intermittent	1	=	8
	Fever, Remittent	6	+	2
	Fever, Typhoid (Enteric)	2	+	6
	Fever, Typho-malarial	5	+	3
	Influenza	6	–	2
	Measles	6	–	2
	Neuralgia	6	=	2
	Pneumonia	5	–	3
	Puerperal Fever	.....	.....	0
	Rheumatism	4	=	4
	Scarlatina	6	–	2
	Small-pox	.....	.....	0
	Tonsilitis	7	–	1
	Whooping-cough	5	–	3
	[Others may be added.]			

a. Please mark the disease of which there is the greatest number of cases, 1; the disease having next greatest number of cases, 2; the next, 3; and so on for each disease, writing the same figures opposite diseases having the same number of cases. Write 0 opposite diseases not present. [For entire plan, see "United Letter Stating Plan," pages 240-1, Annual Report of S. B. of H. for 1877.] A blank indicates that the item has been overlooked.

b. The sign = indicates the usual severity, + indicates more, – indicates less than the usual severity.

Please mail this, *signed* and *dated*, as soon as convenient after close of week specified.

.....*M.D.*

The reverse side of this card bears the printed address of the Secretary.

The compiler, Dr. A. H. Nicholson, has a ruled sheet containing the list of diseases and spaces in which to record the names of places reporting, under which he enters the figures of the various diseases reported.

These figures are wrought out to supply the information summarized under the following schedule:—

188...	For Week ending.....							More (+) Less (−) than for week ending
	Total order where present.	Average order where present.		Order of Area of Prevalence.	Number and per cent. of Observers reporting each Disease.		Per cent. of Observers, week ending	
					Number.	Per cent.		
Brain, inflammation of								
Bowels, inflammation of								
Bronchitis								
Cerebro-spinal Meningitis								
Cholera Infantum								
Cholera Morbus								
Consumption, Pulmonary								
Croup, Membranous								
Diphtheria								
Diarrhœa								
Dysentery								
Erysipelas								
Fever, Intermittent								
Fever, Remittent								
Fever, Typhoid (Enteric)								
Fever, Typho-malarial								
Influenza								
Measles								
Neuralgia								
Pneumona								
Puerperal Fever								
Rheumatism								
Scarlatina								
Small-pox								
Tonsilitis								
Whooping-cough								

Of the four contagious diseases, diphtheria, measles, scarlet fever and smallpox, a separate record is kept of the total number of places reporting them, and of the number reported by regular observers The difference arises, we presume, from the fact that *all* Health officers are required to report the outbreak or occurrence of contagious diseases.

Every week a bulletin based upon these reports and calculations is published, a number of printograph copies being sent to certain newpapers, and other copies being struck off in print and distributed by the Board. The following is a copy of the bulletin for the week preceding our visit:

"Health in Michigan.

[*Bulletin* 27.]

"Reports to the State Board of Health, Lansing, by 51 observers of diseases to different parts of the State, show causes of sickness during the week ending April 1, 1882, as follows:—

	Diseases, in Order of Greatest Area of Prevalence.	Number and per cent. of Observers by whom each Disease was reported.	
		Number.	Per cent.
1	Neuralgia	39	76
2	Rheumatism	37	72
3	Bronchitis	36	71
4	Intermittent Fever	35	69
5	Consumption, of Lungs	28	55
6	Pneumonia	27	53
7	Influenza	26	51
8	Tonsilitis	21	41
9	Remittent Fever	17	33
10	Diphtheria	13	25
11	Whooping-cough	10	20
12	Typho-malarial Fever	10	20
13	Diarrhœa	10	20
14	Inflammation of Bowels	9	18
15	Erysipelas	9	18
16	Measles	8	16
17	Scarlet Fever	6	12
18	Mumps	5	10
19	Typhoid Fever (Enteric)	5	10
20	Cerebro-spinal Meningitis	5	10
21	Membranous Croup	3	6
22	Cholera Morbus	3	6
23	Inflammation of Brain	2	4
24	Smallpox	2	4
25	Pharyngitis	2	4
26	Gastritis	2	4
27	Puerperal Fever	2	4
28	Dysentery	2	4

"Besides those tabulated above, the following named diseases were reported each by one regular observer: Cholera, infantum, spinal meningitis, laryngitis, chorea, hysteria, paralysis, spasmodic croup, and peritonitis.

"For the week ending April 1, 1882, the reports indicate that rheumatism, inflammation of bowels and neuralgia increased, and that diarrhœa, scarlet fever, tonsilitis, consumptions of lungs, membranous croup decreased in area of prevalence.

"While seven diseases increased, seventeen decreased in area of prevalence, the average increase and decrease being by about the same per cent. of observers, so that the decrease was apparently more than double the increase in sickness.

"At the State Capitol, the prevailing winds were southwest; the average temperature was greater, the average absolute humidity and average day ozone, were slightly more, the average relative humidity and the average night ozone were slightly less, during the week ending April 1, than during the preceding week.

"Including reports by regular observers and by others, diphtheria was reported present during the week ending April 1, and since, at 17 places; scarlet fever at 7 places, measles at 7 places, and smallpox at 6 places in all, as follows: in Everett township, Newaygo county (3 cases), and at Grand Rapids, March 28; at Milford (4 new cases), March 30, and one new case reported April 5; in Geneva, Van Buren county, at Battle Creek (2 new cases), and at Detroit (2 cases), April 1, 1882.

"Henry B. Baker,

"Lansing, Mich., April 7, 1882. *Secretary.*"

An examination of the foregoing documents will suffice to show the nature of the facts reported and of the deductions made each week from them. In the annual report the diseases from various divisions of the State are arranged in such a manner that comparison may be instituted. A comparison of meteorological conditions is also made.

Your Committee does not consider that it need dwell more minutely on the plans of the Michigan disease reports, especially as they, amongst other things, may be more fully discussed when you take into consideration a system of disease reports for this Province. Nor will it be necessary in addressing the members of the Board to debate upon the nature and value of the studies to be made of these reports, nor of the importance of the inferences to be drawn from them. We may, however, state that we were very much interested in the diagrams of various kinds arranged in the same way as the diagrams of mortality in the Registrar-General's reports of this Province. Some of the most interesting are those showing synchronous tracings of diseases and meteorological conditions, as for example tracings of temperature, with the diarrhœa curve bearing a direct, and the pneumonia curve an inverse, ratio. The reverse being in a general way true of the ozone curve.

The nature of the meteorological reports may be gathered from an examination of the contents of the Report Blank No. 3, class C. of the appended list of documents from Michigan.

In the subject of vital statistics nothing which could be of service to this Board presented itself to your Committee, except that the Death Certificate gives more particulars than ours. It is a curious fact that the law of Michigan has no clause to compel registration of births. The only way of obtaining birth statistics is by the assessor once a year collecting from the memories of such people as have not moved away from the State, the particulars of the births that have taken place during the preceding year.

The titles of the other documents in the appended list will briefly indicate much of the work of the Board and are self-explanatory. Many of them are of interest merely as indicating how the work of the Secretary is systematized and how it may be lightened by the use of various forms, blanks, printed instructions and record books. In connection with the set of printed envelopes addressed to persons with whom there is frequent commmication, your Committee would draw attention to a piece of office furniture by which much labour is saved. This was a secretary-desk in the face of which were slits with thumb holes for the withdrawal of one envelope at a time, the place of this being immediately taken by another. The pigeon holes were fed from the back, a door closing them all in.

The following is the list of documents furnished us from the Secretary's office:—

DOCUMENTS OF MICHIGAN BOARD OF HEALTH.

A.—Blank Forms of Vital Statistics.

I.
1. Return of Births to Secretary of State.
2. " Marriages " "
3. " Deaths " "
4. List of names of children whose Christian names were not previously given.

I
5. Return of Births in County Clerk's Office. } Made by Supervisor or
6. " Deaths " " " } Assessor.
7. " a marriage to County Clerk's Office, made by Clergyman or [Magistrate.

B.—Blank Forms of Reports of Diseases to Board. *(Vide supra.)*

1. Form of cards illustrating manner of reporting.
2. Ruled blanks for the weekly compilation of the reports from different places:—

(*a*) Of the number of cases of various contagious diseases from different places.

(*b*) Of the amounts of various diseases from different places, with a compilation in the following series of columns :—(1) Total order where present ; (2) Average order where present ; (3) Blank space ; (4) Order of area of prevalence ; (5) Number of observers reporting ; (6) Percentage of reporters ; (7) Per cent. of observers for week ending ..... [preceding week] ; (8) more [observers] (+), less (−) than for week ending ..... [These sheets are supplied with gummed slips, movable, so as to adapt them to the number of places reporting.]

(*c*) The above particulars are copied into a book composed of similar sheets bound together.

3. Bulletin issued from State Office weekly (printed).
4. Number of copies of Bulletin to newspapers (per gelatine pad.)
5. Record of Weekly Reports of diseases for the year received at the State Office from Health Officers of cities and Regular Correspondents.
6. Record of diseases dangerous to public health occurring in city of ——— , Michigan, giving record, number, date, name of patient, sex, age, disease, when taken ill, whether dead, living, recovered.
7. Observer's Blank Book of Forms.

C.—Official Correspondents.

1. Circular asking acceptance of position by correspondents (with circular taken from Report 1873).
2. Circular to correspondents relative to diseases in Michigan (asking for replies).
3. Report of monthly Meteorological Observations :—
   (*a*) Name and address of Observer,
   (*b*) Latitude,
   (*c*) Longitude,
   (*d*) Height of ground above sea-level,
   (*e*) Height of surface of mercury in cistern of Barometer above sea-level.
   (*f*) Daily Observations :—
      (1) Thermometer ; (2) Hygrometer ; (3) Relative Humidity ; (4) Absolute Humidity ; (5) Pressure of Vapour ; (6) Barometer ; (7) Clouds ; (8) Winds [direction and velocity] ; (9) Ozone ; (10) Maximum Thermometer ; (11) Minimum Thermometer ; (12) Rain and Snow, beginning, ending, and amount.
4. Form of Weekly [Weather] Reports throughout the year, made from Reports of correspondents sent to the State Board of Health.

D.—Circulars to Sundry Persons.

1. (*a*), (*b*). Circulars to regular correspondents of Board.
2. Circulars to Observers.
3. " to Health Officers of Townships.
4. " " " of Cities and Villages.
5. " to County Clerk.
6. " to Supervisors and Assessors.

E.—Advice to Health Officers and Boards.

1. To Health Officers of Cities.
2. " " " Townships.

F.—Records Concerning Contagious Diseases.

1. Records of cases which have occurred in County of ——— .
2. Record to Secretary of Board of cases dangerous to Public Health (occurring in) ——— .
3. Notices to Householders and Physicians concerning contagious diseases.

G.—Records of Various Board Expenditures and Disposal of Property.

1. Record of Books loaned from Board of Health Library.
2. " of Issues of Stationery, Forms, Instruments, etc., to, and Acceptances or Performances of Duty by, Correspondents, Observers, Health Officers, etc.
3. Record of distribution of Reports, Circulars, etc., from the office of the Board.
4. Index to names in distribution of Books, Forms, etc.
5. Classified Expense Account of the Board of Health, Michigan.

H.—Miscellaneous Reports, Pamphlets, etc.

1. Receipt for Blanks.
2. Contract prices for printing, binding, etc. [by State printer].
3. Law relating to the establishment of the Michigan State Board of Health.
4. Additional Public Health Laws (1879).
5. Meteorological Post-cards, etc ; (1) General ; (2) Correspondence Cards ; (3) Answer.
6. Labels going with consignments of Books, etc.
7. Form acknowledging receipt of Letter.
8. Complete set of Envelopes with printed address.

Health Department of Toledo.

One of the members of your Committee having seen it reported that a Mayor of Toledo, Ohio, a medical man, had introduced certain sanitary improvements which had changed it from an unhealthy, to a very healthy, city, your Committee took advantage of its proximity to their route of travel and visited it. We arrived in the evening, and shortly afterwards the Health Officer, Dr. Ridenour, to whom we had telegraphed, called upon us. We found that he and one of the ex-Mayors, Dr. Jones, had kindly arranged that we should attend a meeting of the Medical Society, which was to be held at the house of the latter gentleman that evening. After the meeting Dr. Jones very hospitably entertained your Committee, and the gentlemen present gave us an opportunity for discussing matters connected with our mission. They did not claim for Toledo any very extensive or complete sanitary organization. Dr. Jones thought the Report had arisen from the fact that some years ago they had in the neighbourhood of Toledo large gangs of navvies engaged in digging the canal. Their habits were very uncleanly, and fever broke out and carried off many of them. Since their departure Toledo had resumed its usual condition of health, which the doctor claimed as being above the average. The yearly extension of drainage has also much lessened malaria in the city. The principal points in the sanitary system of Toledo are that the city is kept clean by a well ordered scavenger system, with frequent systematized emptying and disinfection of latrines, and that there is a sharp look out for infectious diseases, and a free use of disinfective measures. Nuisances are dealt with by the Sanitary Police, and the Police force, generally, report to the Health Officer and carry out his instructions. There are also district physicians, who look after the very poor sick of their respective districts.

A copy of the Annual Report of the Board of Health of Toledo is herewith presented to our Board. Your Committee is glad to see strongly urged in it the passage of a By-law requiring a vent pipe to be run from the house drain up above the roof of every house, so as to carry off sewer gas over head at a safe distance from pedestrians and inmates of the house—a plan advised by sanitary writers, and repeatedly advocated by the Chairman of this Board. The advantages of subsoil drainage of the sites of houses are also set forth in the Report.

Health System of Detroit.

Both in Lansing and in Toledo, Detroit was referred to as having a very perfect health system, and thither we accordingly bent our steps on the next morning. The Health Board of Detroit has recently been established by a special Act of the Legislature. We were sorry to find that the Health Officer, Dr. O. W. Wright, had been summoned to Chicago to attend a conference regarding the serious epidemic of smallpox in that city. The workings of the department were, however, fully explained by his assistants, E. W. Tallmadge, Esq., and Dr. Rowley. Your Committee also met with a very courteous reception at the hands of Dr. D. O. Farrand, President of the Board. The

Mortuary Record

of Detroit is very well kept, and is of great value, not only in connection with public health, but also from a legal standpoint. In a series of bound volumes are recorded the particulars contained in the following certificate; and it will be seen that these particulars are very full and numerous, affording a great deal of information valuable both to the hygienist and to the lawyer. The index to these volumes is arranged (to save time and labour) on the "three letter combination" plan.

Observe note on margin. Office in Central Market Building.

☞ Physicians are required by the Board of Health to fill out this Certificate accurately, and deliver it to the Health Officer within twenty-four hours after the death of the person to whom it relates. Maximum penalty for neglect of so doing, $.00.

CERTIFICATE OF DEATH. No.....

For the month of..... In the City of Detroit, Mich.

1. Name ..... Colour .....
2. Sex ..... Married..... Single..... .....
3. Age .....
4. Name of father of deceased ..... Nativity .....
5. Name of mother of deceased ..... Nativity .....
6. Occupation of deceased.....
7. Place of birth of deceased (town, county, State).....
8. Name of wife of deceased.....
9. Name of husband of deceased.....
10. Date of birth..... Date of death.....
11. Cause of death.....
12. Duration of disease .....
13. Place of death ..... Street..... Ward
14. Place of burial.....
15. Undertaker.....

Residence of physician.....

Detroit.....188... .....M.D.,
Attending Physician.

Burial Permit No..... Dated.....188... To be buried.....188...

☞ No Burial Permit will be issued upon this Certificate unless correctly filled out, signed and returned by the attending physician or coroner.

Very great care and vigilance are exercised to secure the return of every death. The medical attendant is required to send in the above certificate within twenty-four hours.

dead body can be removed from the house in which it lies without a permit from the Health Office, and this rule is most strictly enforced, as your Committee can testify from an interview which took place between the deputy health officer and an undertaker on the day of our visit, from which it could be gathered plainly that the undertakers know the law, and that they had to respect it. The superintendents of cemeteries are also required, as with us, to see that the law is complied with.

The precautions adopted and carried out by the Health Department of Detroit for

Preventing the Spread of the More Virulent Contagious Diseases,

is very thorough and effective. Physicians are furnished with postal cards (for profes-

sional reasons your Committee would prefer blanks not so exposed to public gaze of carriers, etc.), on the backs of which is the following blank :—

REPORT OF INFECTIOUS DISEASES.

Date .....188...

Name of patient in full.....
Age of patient .....
No. and street, exact .....
Name of disease.....
Place where children from that house attend school.....

Signature of physician.....M.D.

N.B.—The law requires every case, whether in same family or not, to be reported forthwith, in writing, with age, name and locality, under maximum penalty of $500. Send or mail this card promptly to Health Office.

When this card is returned by the Health Officer, its contents are registered in a book made for the purpose, and the following printed notice is sent to the sergeant of Sanitary Police.

OFFICE OF THE BOARD OF HEALTH,
Detroit..... .....188...

To the Sanitary Police.

You are hereby directed to placard house No. .....Street, for.....in the family of....., to leave with the family the enclosed circular,* and to make returns herewith to this office.

By order of the Board of Health.

.....M.D.,
Health Officer

The blank is returned by the sanitary police with a declaration that the order has been carried out, and it is then filed with all the other cards and papers connected with the case.

The placards are large cards—11 × 14 inches—red for scarlet fever, yellow for smallpox, blue for diphtheria, with the name of the disease in large letters, and the following warning in English and German: "$500 fine for removing this placard without authority from the Board of Health. If removed, occupant of house must report to the Health Office within twenty-four hours under the same penalty."

If it be deemed necessary a sanitary inspection of the premises is made and any objectionable condition removed, such as may be caused by manure heaps, filthy vaults, defective drainage or plumbing, polluted wells, foul cisterns, want of drainage for wet cellars or low grounds, etc.

The greatest care is taken not to interfere in any way "by word, act, or look with the practice of the attending physicians." The notice to the Inspector and his return are both placed on file as before.

Notice is sent to the schools where the children of the family attend, if it be dangerous for them to continue to do so.

When the case ends (whether in recovery or death) a card similar to the following is sent in by the attending physician :—

REPORT OF RECOVERY FROM INFECTIOUS DISEASES.

Date.....188...

Name of patient in full.....
No. and Street, exact .....
From what disease recovered .....
How long sick .....

Signature of physician .....

N.B.—Placard will remain on house at least four weeks, unless attending physician reports recovery earlier. ☞ Send or mail this card to Health Office.

* The circular above referred to is a pamphlet on the means to be used to prevent the spread of the disease.

Thereupon the following order is given to a competent officer, sometimes a junior medical practitioner, who has been instructed in the work :—

OFFICE OF THE BOARD OF HEALTH,
Detroit.....188...

To.....

You are hereby directed to disinfect House No.....street, in the family of.....where a case of.....has terminated by.....
to deliver to the family the enclosed certificate, and to report herewith to this office.

By order of the Board of Health.

O. W. WIGHT,
Health Officer.

The disinfection performed, the officer removes the placards, and hands to the family the following certificate :—

OFFICE OF THE BOARD OF HEALTH,
Office in Central Market Building,
Detroit.....188...

It is hereby certified that .....
of.....street, ...Ward,
has recovered from.....

The house has been disinfected, and the inmates may again have the privilege of schools, library, etc., with safety to the public health ; but follow school regulations.

Placards can be removed from houses only by an officer from this department, or by a written permit from the Health Officer.

By order of the Board of Health.

N.B.—Show this certificate to principals of schools, librarian, etc.

O. W. WIGHT,
Health Officer.

He then makes his returns and these papers are filed with the others, and all are placed away, making a complete history, which can at any time be referred to if needed.

They are all noted in a sort of diary form from time to time in a book called the Infectious Disease Register, from which I give a leaf with suppositious names. Supposing at any time we want to refer to the case of James Stephens, who had diphtheria, we look in the "Three Letter Combination Index" under "STE," and we find :—

SURNAME.	CHRISTIAN NAME.	DISEASE.	PAGES.		RESIDENCE, ETC.
Stephens..... ...	James	D..	71	221	18 Union Street.

We turn up pages 71 and 221 of the Infectious Disease Register and read as follows :—

1882.
April 8.—James Stephens ; 18 Union Street ; age 20 ; diphtheria ; reported by Dr. J. N. Thompson.
" 9.—Ordered to placard.
" 10.—House placarded.
" 14.—Recovered.
" 15.—Ordered to disinfect.
" 16—House disinfected.

When death occurs the undertaker is instructed not to have a funeral in a church or other public place and not to open the coffin ; and the endeavour is made to persuade the friends to have the funeral as private as possible, and not to allow very young persons to act as pall bearers or come into close proximity with the corpse.

The great benefits from such a system as the above must be apparent to all intelligent persons who understand the nature of such diseases as smallpox, scarlet fever, and diphtheria. And there is no doubt that after a time they will be so appreciated that all

crotchety notions about "personal liberty," "violations of personal confidence," and the like will give way before them.*

In regard to

NUISANCES,

the system of the Board seems very efficient, but does not differ materially from that in other places. Blanks are in existence on which persons record complaints. An Inspector then investigates. If the complaint be sustained a notice is sent to the owner requiring him to remedy the nuisance. Sometimes he is asked to come to the office, and the matter is discussed. Printed forms for all these purposes exist.

Amongst nuisances on a large scale which have attracted the attention of the Board, have been slaughter houses, a glucose factory, and the smoke from manufactories. To remedy some of these, further legislation of an obvious character has been recommended, as also for the regulation of the milk supply, of the ice supply, and of the plumbing and draining of the city.

Before returning home your Committee went over to

WINDSOR,

and were glad to find there a very efficient Board of Health. We had interviews with Dr. Coventry, Mayor, and Chairman of the Board, and with Dr. Carney, also a member of the Board. The same effective action with regard to contagious diseases which exists in Detroit, is also carried out in Windsor.

Your Committee cannot close this report without

EXPRESSING THEIR OBLIGATIONS

to Dr. H. B. Baker, Dr. Avery, Rev. Dr. Jacokes, Dr. Hazlewood, Dr. Kellog, and other members of the State Board of Health of Michigan; to Prof. Kedzie, a late member of the Board, and Professor at the Agricultural College; to John K. Allen, Esq., Dr. A. W. Nicholson and other gentlemen in the Secretary's Office; to Dr. Sheldon, of Greenville; to Drs. Jones and Ridenour, of Toledo; and to Dr. Farrand, Dr. O. W. Wight, E. W. Tallmadge, Esq., and Dr. Rowley, of Detroit; and to others mentioned in this Report.

All of which is respectfully submitted.

WM. OLDRIGHT.
J. J. CASSIDY.

REMARKS ON THE PLANS CARRIED OUT IN DETROIT TO PREVENT SPREAD OF INFECTIOUS DISEASES.

DR. O. W. WIGHT.

(*Referred to in the foot note.*)

Such are the elaborate measures taken to restrict the spread of infectious diseases, which in our great centres of population perpetually gather a rich harvest of victims. The labour is great, but I have no doubt that the results, if they could be accurately measured, would astonish the most thoughtful citizen.

The advantages of the system may be briefly stated:—

1. It enables the Health Department, and the public through the Health Department, to know every day in the year the exact number of cases of infectious diseases in the city and their precise location. Rumour and *sensational exaggeration* in regard to the

* Since the time of presenting this Report, the First Annual Report of the Health Office of Detroit has been published. It contains an article on this subject, a portion of which is printed on this and the next two pages. In it will be found some very forcible sentences.

prevalence of contagious maladies, which are liable to alarm the people needlessly and to *interfere with the pursuits of life, can then be corrected by facts.* And the truth of a violent epidemic cannot be suppressed in the interest of commerce to the criminal endangering of the outside world.

2. The exact percentage of mortality is constantly known, revealing the severity or mildness of an epidemic.

3. The system affords especial means of studying the conditions under which contagious diseases flourish, or to what extent they are influenced by sanitary surroundings.

4. It diminishes the spread of contagious diseases by protecting large congregations of children in schools from the presence of those bearing infection in their persons or clothes; by preventing exposure of the living at public funerals; by revealing to all who can see and read the places where such diseases may be caught, and by destroying the lingering germs of contagion in sick rooms by means of thorough disinfection. My experience convinces me that a community will give a wide berth to smallpox, scarlet fever or diphtheria if you will only let them know where it is. I have frequently seen quite small children cross over to the other side of the street when approaching a house on the door of which was placed a placard revealing the existence of contagious disease within. *It is wicked to conceal from God's little ones the fountains of infectious suffering and death.*

The difficulties of carrying out the system are considerable, but not insuperable:—

1. When the majority of educated physicians are ready to co-operate with the health authority in carrying out any reasonable system of protecting the public from contagious diseases, the negligence of many and the perversity of a few must be overcome by the unflinching execution of the law. To the credit of the profession in Detroit it must be said that no one has raised the question of fees for reporting contagious diseases to the Health Office. An unseemly discussion of that question is now going on in Great Britain. The medical practitioner depends upon the patronage of the public, and should be willing to do for the public at large a service that costs very little time and trouble, and is attended with no expense. The necessity of reporting to the Health Office all deaths, with the causes, in order to get a permit to bury, puts the doctor on his good behaviour. A few attempts to return croup for diphtheria, spotted fever for scarlatina, etc., have been met with an order for a coronor's inquest.* Inability to make a diagnosis has sometimes been urged as an excuse by delinquent quacks, but an unmistakable indication of criminal prosecution soon revealed to them that the responsibilities of assumed knowledge cannot be avoided by a plea of ignorance. In some instances doctors have prematurely reported recovery. The law of duration in contagious diseases is too well known to allow such heedlessness to escape notice and rebuke. It is sometimes disagreeable to supplement the mental and moral defects of a portion of the profession by the terror of criminal law, but faithful sanitary administration requires it.

2. *At first the people objected* to having their houses placarded, as a violation of personal liberty. A little argument convinced reasonable citizens that *no man has the natural or acquired right to expose his neighbours to deadly contagious disease by concealing it in his own house. Personal liberty to give smallpox to somebody else had better be abridged as soon as possible. Personal liberty to send scarlet fever into a school with your child is rather diabolical than beneficent.* Personal liberty to infect a church with a diphtheria corpse is tempting Providence to start an epidemic. A law-abiding community submitted, and *to-day the system of placarding, if it were left to an election, would receive a majority of votes in its favour.* Experience proves its value in many ways to the citizen. He knows and feels that, by reason of it, his family is more secure against diseases that cost money, anxiety and sorrow.

The defects of the system are already apparent to educated sanitarians:—

1. So far as smallpox is concerned, proper vaccination and re-vaccination at suitable ages should be universal and compulsory. I am sorry to say that, in this respect, the sanitary code of Detroit is defective. Without vaccination, suppression of the disease

* It must be remembered that in Michigan the system of free trade in medicine exists, and that there is not the same security for professional behaviour there as with us.

allows the greater accumulation of material for the conflagration of an epidemic, that sooner or later may get under way and defy all control. Every escape from scarlet fever is a positive gain, for susceptibility to the disease decreases with age. Diphtheria should be suppressed all the time, for one attack does not secure immunity in the future.

2. The efficiency of the system depends to a great extent on the willing or enforced co-operation of the medical profession. Just so far as the profession falls short of an ideal standard must the system fail to reach its ideal value, however well it may be administered.

The system in Detroit is supplemented, as it should be, by a pest-house, to which the sick with contagious diseases, who have no homes, can be taken. With an efficient system of placarding and isolation, it is more economic, more humane, if not safer, to leave patients who have homes under the care of their families and friends. However excellent a hospital and its service may be, households are unwilling to give up any of their sick members to be nursed by unknown hands in a strange place. To force away children from parents, from brothers and sisters, and parents from children and from one another, for the purpose of isolating infectious disease, exposes the public by transportation of the afflicted, diminishes the chances of recovery, outrages the unreasoning affections, and invades the sanctity of home. Sanitation must reckon with the unalterable instincts of humanity and restrain itself within the boundaries of reasonable endeavour.

Therefore, in my judgment, the isolation of contagious and infectious diseases in the family, which is the unit of our political society and Christian civilization, is wisest and best. After long administrative training we shall get the willing co-operation of households and their chosen physicians. *The day will come when exposure of others to our diseases will be recognized as a crime*, the punishment of which will be demanded by the public conscience.

In the meantime we must combat superstition, diffuse rational knowledge, and protect the people against pestilence by the simplest and most effective means at our command, winning confidence by patient, kindly instruction, only using repression and the lash of the law when we must.

For the prevention of infectious diseases we are sadly in need of intelligent and trained private endeavour, as a supplement to public sanitation. Would that the clergy, taking for texts the hygienic precepts of Moses, which have not been surpassed by the so-called revelations of modern science, might preach the gospel of cleanliness and thus open up to their people new avenues of godliness! Would that we had in every city a society of devoted men and women, like the order of the Red Cross, whose especial duty it should be to go into the by-ways, not far from their own doors, and save from the perils of contagion and filth a greater number who perish, year by year, in times of peace than ever die on the fields of battle in times of war!

Article V.

CIRCULAR TO THE CLERKS OF MUNICIPALITIES.

Provincial Board of Health, Ontario,
Parliament Buildings,
Toronto, May.....1882.

To the Clerk of the Municipality of

Dear Sir,—The Provincial Board of Health of Ontario, established under "The Public Health Act, 1882," in the discharge of their duties as prescribed in section 3—

"3. The Provincial Board of Health shall take cognizance of the interests of health and life among the people of the Province. They shall especially study the vital statistics of the Province, and shall endeavour to make an intelligent and profitable use of the collected records of deaths and sickness among the people; they shall make sanitary investigations and inquiries respecting causes of disease, and especially of

epidemics; the causes of mortality and the effects of localities, employment, conditions, habits, and other circumstances upon the health of the people; they shall make such suggestions as to the prevention and introduction of contagious and infectious diseases as they shall deem most effective and proper, and as will prevent and limit as far as possible the rise and spread of disease; and they shall, when required or when they deem it best, advise officers of the Government and Local Boards of Health in regard to the public health, and as to the means to be adopted to secure the same, and as to location, drainage, water supply, disposal of excreta, heating and ventilation of any public institution or building"—

desire to secure the assistance and hearty coöperation of Municipal Councils, and therefore request your Municipal Council to inform our Secretary at your earliest convenience if you have exercised the powers already vested in you, and set forth in the Municipal Institutions Act, Chapter 174, Revised Statutes, Ontario, section 466 and sub-sections thereof, giving you power to enact By-laws for the preservation of the public health, and the prevention of the spread of contagious and infectious diseases.

Especially we desire to know if By-laws regarding the construction and location of wells, privies, water-supply, drainage, the cleansing of cesspools, and the removal of other known causes of typhoid fever are enforced; also if means are adopted and enforced to isolate cases of smallpox, diphtheria, scarlet fever, whooping cough, puerperal fever, erysipelas, measles, cholera, etc., so as to prevent the spread of these contagious diseases.

We desire also to know if your Local Board, under "The Public Health Act, Chapter 190," are actively engagaged in the discharge of their duties as special Health officers, or if they systematically inspect, or cause to be inspected, all localities dangerous to public health, and if a record is kept of the exact location of cesspools properly so-called.

In order that the residents of the Province of Ontario may realize the great benefits which the Public Health Acts can afford if enforced, it is necessary that the Provincial Board of Health shall be constantly informed regarding the causes and prevalence of disease, and the means adopted for the removal of these causes, and for the prevention of the spread of contagious and infectious diseases in each locality in this Province.

We therefore feel it our duty to ask your Council if they are willing to send our Board weekly or monthly reports on these important points, for which reports we are prepared to send printed forms free of charge.

To such as choose to place themselves in communication with us we will send such sanitary pamphlets and other information as we may suppose may be of importance and interest to you.

I have the honour to be,

Yours truly,

PETER H. BRYCE, *Secretary.*

ARTICLE VI.

CIRCULAR TO PHYSICIANS.

PROVINCIAL BOARD OF HEALTH OFFICE,
PARLIAMENT BUILDINGS,
TORONTO, May.....1882.

DEAR DOCTOR,—The Board has directed me to send you a copy of a circular about to be addressed to the Clerks of Municipalities, and to request you to use your influence to obtain a prompt and careful consideration of its contents, and such action upon it as you think may be secured.

The Board counts largely upon the coöperation of medical men in advocating, and interesting the people in such sanitary reforms and systematic action as will tend to lessen the death and sickness rates, and as a consequence, the misery and poverty in the Province.

Trusting that you will oblige the Board by a hearty response,

I have the honour to be,

Yours truly,

PETER H. BRYCE, *Secretary.*

APPENDIX C.

Article I.

N.B.—The receiver of this Pamphlet is requested to preserve it for reference when required by himself or others.

HOW TO CHECK THE SPREAD OF CONTAGIOUS OR INFECTIOUS DISEASES: SCARLET FEVER, DIPHTHERIA, SMALLPOX, Etc.

[No. 4.] Document issued by the Provincial Board of Health of Ontario.

These diseases are spread by means of infectious particles going from person to person, and can be stopped if care and systematic means are taken to destroy these disease germs, and to prevent their being carried from one person to another.

Those parts of the body which are the breeding places of the contagious particles give off the poison in the greatest amount—for example:—

In Scarlet Fever, the mouth, throat, nasal passages and skin.
" Diphtheria, the mouth throat, and nasal passages.
" Smallpox, the pustules, chiefly of the skin.
" Measles, the skin and air passages.
" Whooping Cough, the air passages.
" Typhoid Fever and Cholera, the discharges from the bowels.

The portions of the body thrown off, and containing the contagion may pass into the air, or find their way into water or food, and in this way be introduced by breathing, drinking or eating, or through broken surfaces of the body.

It will be seen that the first five diseases in the above enumeration are very readily communicable through the atmosphere. The contagion of the first three remains virulent for a great length of time and at great distances; and as these diseases are very serious in their effects, our consideration will at present be chiefly directed to them in the following rules for checking their spread:—

What the General Public may Reasonably Expect from Persons Afflicted with Contagious Diseases, from their Friends, and from the Municipal Authorities.

1. When anybody, especially a child or young person, has sore throat, bad breath or fever, he should be kept separated from all other persons except necessary attendants, until it be ascertained whether he has scarlet fever, diphtheria or some other communicable disease.

2. Every case of diphtheria, scarlet fever or smallpox should be at once reported to the Health Officer appointed by the Local Board of Health. (See Secs. 18, 19 and 20, "Public Health Act of 1882.")

3. On receipt of such notices, the Local Health officers should immediately verify the reports of cases. If the medical attendant reports the case this will be sufficient verification.

The Board should secure the isolation of those sick with or exposed to these diseases;
Give notice of infected places;
Regulate funerals of persons dead from infectious diseases;
Disinfect rooms, clothing, and premises;
Give certificates of recovery and of freedom from liability to communicate the disease.

4. Every person known to be sick with scarlet fever, diphtheria or smallpox should be promptly and effectually isolated from the public; no more persons than are necessary should have charge of the patient, and these should be restricted in, their intercourse with other persons.

5. Notices should be placed on the house in which a case of scarlet fever, diphtheria or smallpox exists, and no unnecessary persons allowed to enter.

(In regard to above, see "Public Health Act, 1882," and Caps. 190 and 174, R. S. O.

MANAGEMENT OF THE SICK ROOM AND DUTIES OF ATTENDANTS.

6. The bed-room of a person sick with scarlet fever, diphtheria, smallpox or any other infectious disease should be cleared of all needless clothing, carpets, drapery, or any material liable to harbour the poison of the disease. The room should be large, having an absolute air-space of at least 1,000 cubic feet for each individual, and should have a liberal supply of fresh air—at least 3,000 cubic feet per head per hour. In summer the supply should be unlimited; windows thrown open, and draughts on the patient prevented by a fine gauze or wire netting, slanting from the top of the sash to within two inches of the ceiling.

7. Discharges from the throat, nose and mouth should be received, or immediately placed, in vessels containing some of the disinfectants named for that purpose in sec. 8; if on rags or handkerchiefs, these should be immediately burned.

Likewise, the discharges from the kidneys and bowels should be passed into vessels containing a pint of disinfectant, and immediately buried at least a hundred feet from any well or other drinking-water supply. If these precautions are impracticable, let the discharges be passed on old cloths, which should immediately be burned.

8. For convenience a few disinfectants are here grouped together:—

(1) Solution of chlorinated soda (or lime).

(2) " chloride of zinc: water, 1 gal.; sulphate of zinc, 4 oz.; common salt, 2 oz.

(3) " chloride of lead: dissolve two drachms, of nitrate of lead in a quart of water,—then, in a larger vessel containing a gallon of water, dissolve two tablespoonfuls of common salt (chloride of sodium); mix the two solutions together and store for daily use.

The above will answer for all purposes of disinfection; discharges, linen, cups, etc.

(4) Carbolic acid solution—say 1 part in 20 to 40 of water, for discharges and clothes, scrubbing floors, etc., and washing hands.

(5) Copperas solution—1½ lbs. commercial sulphate of iron to 1 gal. water.

(6) Carbolate of lime.

The two last are good for discharges; the copperas very good for privies; the carbolate of lime for sprinkling dry in rooms, sheds, etc.

The carbolic acid solution may be made to permeate the air by spray from an atomizer, and to destroy germs in breathable air by actual contact.

9. *Purification of Clothes and Bedding.*—The best plan, where practicable, is by the agency of heat. Dr. Henry, of Manchester, disinfected scarlet fever clothing by exposure to 212° F. for one hour. A brick oven or portable furnace will answer the purpose, the clothes to be disinfected being hung on wires. Boiling clothes is not so good as baking, but still is useful. To every ten gallons of boiling water add half or three-quarters of a gallon of commercial solution of chloride of lime; or the clothes may be laid for twenty-four hours in a solution of sulphate of zinc in the proportion of 1 to 120, or of chloride of zinc in the proportion of 1 to 240, or in the chloride of lead solution (Sec. 8), and then should be washed with soap and water if they cannot be baked.

10. Nurses and attendants should be required to keep themselves and their patients as clean as possible, disinfecting their hands frequently by chlorinated soda or other disinfectant.

Attendants should also wear cotton or linen (not woollen) clothes or overalls, to which particles will not so readily adhere, and which may be more easily disinfected.

11. Every person recovering from diphtheria should be considered dangerous, and should not be permitted to associate with others, or attend any public assembly until the throat and sores on the lips and nose are healed for some days; nor before, in the judgment of the physician, he can do so without endangering others, nor until his clothing has been thoroughly disinfected. These restrictions, of course, extend to churches, schools, etc. Every apartment of the house must also be thoroughly disinfected before the patient is permitted to go at large.

After recovery from scarlet fever and smallpox, a still longer time must elapse to allow all particles of disease-bearing skin to be thrown off.

12. The body of a person who has died of diphtheria, scarlet fever or smallpox, should be washed with a strong chloride of lead or zinc solution, double the strength of those in Sec. 8, wrapped in a sheet wet with the same, and at once buried. In no case should the body be exposed to view; no public funeral held, and as few persons as possible should attend.

Disinfection of Dwellings and Premises after Recovery or Death.

13. In addition to thorough cleansing of all wood work with soft soap, and with water to which carbolic acid has been added (one pint of the common liquid to four gallons of water), and to removing and washing all fabrics which can be removed in the manner described in Sec. 9, and brushing the walls, the rooms should be fumigated for a period varying from three to twenty-four hours with sulphurous acid. A metallic dish should be suspended over a tub of water, or should have ashes in it. All doors, windows, and the chimney being tightly closed, sulphur, mixed with a little saltpetre, is to be then placed into the dish and lighted. The proportions should be two pounds of sulphur for every 1,000 cubic feet of space. In a very long room it is best to have the sulphur in two or more places. After the fumigation is completed, the doors and windows should be opened, and kept open for several hours. In disinfecting in this manner with sulphurous acid, the person setting fire to the saltpetre and sulphur must make a precipitate escape from the room the instant the sulphur is burning. Carpets fumigated on the floor by this method should afterwards be removed to the open air and thoroughly beaten. Pillows and feather beds, mattrasses, and upholstered furniture, after being disinfected on the outside, should be cut open and their contents exposed to the fumes of burning sulphur. In no case should the disinfection of clothing and bedding be omitted. Where articles of clothing, towels or anything used by sick persons are considered too valueless to be kept, they must not be burned in the house or open air before they have been completely disinfected. A bad epidemic at Philadelphia resulted from neglect of this precaution.

Precautions for Well People to Avoid Scarlet Fever, Diphtheria and Smallpox.

14. Avoid exposure to special contagion. There is more danger for children than for adults; do not, therefore, let a child go near a case. Do not permit any person or thing, dog, cat or other animal, plaything, letters, etc., to come or be brought direct from a case of these diseases to a child, unless previously disinfected under competent supervision. If you do visit a case, bathe yourself, especially your hands, face and hair, in a disinfectant solution, and change and disinfect your clothing before you go where there is a child. See that your residence, premises, etc., are kept clean and dry: that the sewer connections are well trapped and drains well ventilated. Never allow the passages from any person sick with the disease to be placed, without previous disinfection, in water closets or privies, but have them attended to as in Secs. 7 and 8. Give special attention to the purity of your milk supply. Do not allow a child to ride in any vehicle where there is suspicion of infected persons having travelled. Avoid exposure to high winds and cold, dry air. Do not wear or handle clothing worn by a person during sickness or convalescence from these diseases. Beware of any person who has a sore throat or running at the nose. Do not kiss or take the breath of such a person. Do not drink from the same cup or put in your mouth anything used by a

person who has any of the above diseases. This should be especially attended to in the case of children.

15. In case of all these diseases, remember that the contagion may be stored up from one season to another if not destroyed. Do not let it be so stored; and see that your children do not visit a house where one of the above diseases has been, even though some months have since elapsed, unless you know that the house, clothes, etc., have been thoroughly disinfected.

16. In the case of smallpox, too much care cannot be taken to see that every person who has not been vaccinated within seven years be vaccinated or re-vaccinated.

17. If vaccination has "taken well" a few years before, this is, if anything, an extra reason for re-vaccination. Persons who have had smallpox may take it again.

18. With regard to all these diseases, remember that a mild form in one person may originate a severe form in another.

19. In connection with this subject, it should be remembered that too much attention cannot be paid to surroundings in general, such as drainage, ventilation, food, warmth, etc. Temperature and rain-fall have much to do with the spread of some of these diseases. Diphtheria, for example, is generally least prevalent in August, increases until January, and declines again with the same regularity until August. It is also most fatal in the lowest and worst drained parts of cities. Examine the relative positions of wells and privies. Where city water is used, investigate the source of water supply, and the place of debouchure of sewers. (An outbreak of diphtheria in Naples. 1872, was clearly traced to contaminated water.) In country districts, isolated outbreaks, traceable to cesspool effluvia, are not at all uncommon. Frequently the water-closet drain will be found discharging into a cess-pool cleaned out only at rare intervals, the gases generated in the cesspool having no outlet except through the water-closet and into the house. Proper attention to the trapping of waste pipes leading to sewers is too frequently taken for granted, hence examine carefully into the arrangement and ventilation of drains. Ascertain whether, in consequence of attention not having been duly paid to the trapping of overflow, lavatory, and every other waste pipe, gases are not being conveyed in sundry ingenious ways into the various apartments from which they were presumed to be excluded; that, in other words, the house drains and sewers have not been ventilated into the bed rooms.

ARTICLE II.

CIRCULAR SENT TO CLERGYMEN, HIGH SCHOOL TEACHERS AND PUBLIC SCHOOL INSPECTORS WITH COPIES OF PAMPHLET FOUND IN ARTICLE I.

PROVINCIAL BOARD OF HEALTH OFFICE,
PARLIAMENT BUILDINGS,
TORONTO, July 25th, 1882.

DEAR SIR,—We have forwarded to you a copy of the pamphlet issued by this Board, on the Prevention of Contagious Diseases; and we trust that you will find it to supply an amount of information, useful in proportion as it becomes disseminated.

To this end the Board hopes that you will use that influence, which your position gives you, in such a manner as your wisdom may suggest as wise.

This Board feels that it is a duty which is incumbent upon every person of influence, to use special means for impressing upon the people the value and necessity of Sanitary measures for lessening mortality by preserving and improving the public health.

We would most respectfully request that you will at your convenience inform this Board of the sanitary condition of your neighbourhood, and of the means you have used to disseminate sanitary knowledge.

I have the honour to be, Sir,
Your obedient servant,
PETER H. BRYCE, *Secretary.*

Article III.

[No. 7.] Issued by the Provincial Board of Health of Ontario.

TREATMENT OF THE DROWNED.

Read this paper now, so as to be ready to act in an emergency. Keep it for reference, and post it in a conspicuous place.

Rule 1. Proceed at once to employ means to restore breathing. Do not delay this in order to procure shelter, warmth, stimulants, etc.

Rule 2. *Remove all obstructions to breathing.*—Instantly loosen or cut apart all neck and waist bands; turn the patient on his face, with the head lower than the feet; stand astride the hips, with your face towards his head, and, locking your fingers together under his belly, raise the body as high as you can without lifting the forehead off the ground, and give the body a quick jerk to remove mucus and water from the mouth and windpipe. Hold the body suspended long enough to slowly count one, two, three, four, five, repeating the jerk more gently two or three times.

Rule 3. Next place the patient on his back on a flat surface, inclined a little from the feet upwards, raise and support the head and shoulders on a firm cushion, or folded article of dress, placed under the shoulder blades. Cleanse the mouth and nostrils, open the mouth, draw forward the patient's tongue, securing it there either by holding it with the fingers, or by a piece of string or an elastic band placed over it and under the chin.

Rule 4. Grasp the patient's arms just above the elbows, and draw them gently and steadily upwards until they meet above the head. (This is for the purpose of drawing air into the lungs.)

Keep the arms in this position for two seconds, then turn them down and press them gently and firmly for two seconds against the sides of the chest, pressing at the same time on the breast and abdomen. (This is with the object of pressing air out of the lungs.) Pressure on the breast-bone and abdomen by an assistant will aid this action.

Repeat these measures alternately and deliberately until a spontaneous effort to breathe is perceived, immediately upon which cease to imitate the movements of breathing, and proceed to induce circulation and warmth.

Rule 5. *To excite Respiration.*—During the employment of the above methods irritate the nostrils with snuff or smelling-salts, or tickle the throat with a feather. Rub the chest and face briskly, and dash cold and hot water alternately upon the patient.

Do not be too soon discouraged. Remember that at any time within two hours your efforts may be successful.

Rule 6. *To induce Circulation and Warmth.*—After breathing is commenced wrap the patient in warm blankets, and apply bottles of hot water, hot bricks, or anything to restore heat.

Warm the head nearly as fast as the body, lest convulsions should be induced. Rubbing the body with warm cloths, or with the hands, and slapping the fleshy parts may assist to restore warmth and breathing.

If the patient can swallow *with safety* give him hot coffee, tea, milk or spirits.

Allow the patient to have abundance of fresh air.

HINTS TO WHARF OWNERS AND TO OTHER PERSONS RESIDING NEAR THE WATER.

Keep a coil of rope and pieces of boards in some convenient place, ready for immediate use.

TO PERSONS WHO CANNOT SWIM.

If you get into water beyond your depth do not plunge, struggle, nor throw your hands and arms out of the water. "Tread water" in the erect position, by moving the feet up and down, at the same time slowly paddling with the hands, keeping them under water. If any one approaches to rescue you, preserve your presence of mind and do not grasp him: do what he tells you. If any small object of support be thrown to you, place it under your chest or arm-pits, and do not struggle to raise yourself out of the water; your head will not go under if you follow these directions; and you may keep your mouth and nose above water long enough for assistance to arrive. By considering these directions carefully now, you will be less apt to lose your presence of mind should occasion arise for acting on them

Parents should have their children taught to swim. Many deaths might be thereby averted.

N. B.—In suffocation by smoke or poisonous gas, as also in cases of hanging or choking, proceed in the same way as in drowning, seeing that no obstruction exists in the mouth and throat, but omitting the effort to expel water, etc., from the lungs.

ARTICLE IV.

MEMORANDUM FORWARDED WITH OTHER DOCUMENTS OF THE BOARD TO CLERKS, PHYSICIANS, &c., CONCERNING THE POWERS AND DUTIES OF MUNICIPAL AUTHORITIES RESPECTING THE PUBLIC HEALTH.

The Act respecting the Public Health, being Cap. 190 of the Revised Statutes of Ontario, provides: —

That the members of the Municipal Council of every township, city, town and incorporated village shall be Health officers, and gives such Council power to delegate its powers to a Committee of their own number, or to such persons as the Council thinks best.

1. Such Health officers are given power in the daytime to enter any premises within their municipality, and, if found filthy or unclean, or in way dangerous to the public health, they may order the proprietor or occupant to cleanse them, and in default of his doing so, may cause them to be cleansed.

2. In case of a malignant and fatal disease being discovered in any house in the municipality of a city, town, village or township, or within a mile thereof, the Health Officers may compel the removal of the occupants from the premises until they can be thoroughly disinfected and cleansed.

Such a Board likewise has power to make regulations for purposes of isolation within the municipality, under Section 17 and other Sections of the Public Health Act of 1882, a copy of which Act is sent herewith.

The Health officers should visit and inspect premises in respect of which a complaint is made, or where they deem it necessary to make an investigation, and may order the removal of any causes of disease which they find there.

A Local Board of Health has no power to enact by-laws or rules for the purpose of carrying out sanitary reforms, but the Municipal Institutions Act (R. S. O. Cap. 174) provides that the Municipal Council of every city, town or incorporated village may pass by-laws—

1. For regulating public wells and conveniences for water; and for preventing the wasting and fouling of public water.

2. For preventing the use of deleterious materials in bread.

3. For seizing and destroying tainted and unwholesome meat, poultry, fish and other articles of food.

4. For preventing and abating public nuisances.

5. For preventing or regulating the construction of privy vaults and slaughter houses.

6. For providing for the health of the municipality, and against the spreading of contagious and infectious diseases.

7. For the interment of the dead.

8. For cleaning away filth from the streets.

9. For regulating the construction of privy vaults, water-closets, cellars, sinks, and for the filling up, draining and cleansing of any ground cellars, private drains, sinks, cesspools or privies.

All these powers rest in Municipal Councils irrespective of any duties vested in the members of Local Boards of Health under the Health Act.

The "Act respecting Vaccination and Inoculation" gives further powers for preventing inoculation, and for providing, in cities, for free and compulsory vaccination.

In order efficiently to enforce sanitary laws in accordance with the foregoing legislative enactments, it would materially assist matters if a Health Officer were appointed by the Council in each municipality, the special duty of whom it would be to see to the enforcement and carrying out of the provisions of any by-law or the requirements of the Local Board of Health.

This Health Officer should be made the official channel of communication between the Provincial Board and the Local Boards of Health, and should be a member of the Local Board. He should report at regular intervals regarding contagious and infectious diseases, and other matters of interest relating to the public health of the municipality.

Note.—It has been held an indictable offence to bring a glandered horse into the market, and to expose a person afflicted with smallpox in an open street.

[No. 9.]

Article V.

COPY OF CIRCULAR CONCERNING THE CLASSIFICATION OF DISEASES WITH APPENDED CLASSIFICATION.

Office Provincial Board of Health,
Parliament Buildings.

To Correspondents of the Provincial Board of Health :—

It is requested that in making returns you will follow, as far as possible, the classification adopted by this Board, thus promoting uniformity and accuracy in the Weekly Reports.

To Physicians :—

In making returns of deaths to the Clerks of Municipalities, it is hoped that care will be taken to have them adapt the same classification.

To Clerks of Municipalities :—

It is expected that Clerks will require of persons, not physicians, reporting cases of death, that it be done by a physician's certificate stating the cause of death, or, in case this be not presented, that care be taken that the disease be given according to the terms used in the classification adopted by this Board.

Your obedient servant,
Dr. P. H. Bryce, M.A.,
Secretary.

The following is the classification of diseases adopted by the Provincial Board of Health :—

CLASS I.—ZYMOTIC DISEASES (*Zymotici*).

Order 1.—Miasmatic Diseases (*Miasmatici*).

Anthrax (Carbuncle).
Cholera asiaticum (Asiatic Cholera).
Cholera Infantum.
Cholera Morbus.
Cynanche trachealis (Membranous Croup).
Diarrhœa acuta (Acute Diarrhœa).
Diarrhœa chronica (Chronic Diarrhœa).
Dysenteria acuta (Acute Dysentery).
Diphtheria (Diphtheria).
Entero-colitis.
Erysipelas (Erysipelas).
Erythema (Erythema).
Febris biliosa (Bilious Fever).
Febris cerebro-spinalis (Cerebro Spinal Fever).
Febris congestiva (Congestive Fever).
Febris flava (Yellow Fever).
Febris intermittens (Intermittent Fever).
Febris remittens (Remittent Fever).
Febris typhoides (Typhoid Fever).
Febris typhus (Typhus Fever).
Furunculus (Boil).
Influenza (Influenza).
Miliaria (Miliaria).
Morbilli (Measles).
Parotitis (Mumps).
Pertussis (Whooping Cough).
Pyæmia (Pyæmia).
Scarlatina (Scarlet Fever).
Tonsillitis (Quinsy).
Varicella (Chicken-pox).
Variola (Small-pox).
Varioloides (Varoloid).
Other Miasmatic Diseases.

Order 2.—Enthetic or Inoculated Diseases (*Enthetici*).

Equinia (Glanders).
Gonorrhœa (Gonorrhœa).
Hydrophobia (Hydrophobia).
Morbus ossium syphiliticus.
Necusia (Dissection Wound).
Ophthalmia Gonorrhoica.
Phagadena gangrænosa (Hospital Gangrene).
Pustula maligna (Malignant Pustule).
Syphilis primaria (Primary Syphilis).
Syphilis secondaria (Secondary Syphilis).
Syphilis tertiaria (Tertiary Syphilis).

ORDER 3.—DIETIC DISEASES (*Dietici*).

Alcoholismus (Alcoholism).
Bronchocele (Bronchocele).
Cretinismus (Cretinism).
Delirium alcoholicum (Delirium Tremens).
Ebriositas (Drunkenness).
Ergotismus (Ergotism).
Febris a fame (Famine Fever).
Purpura (Purpura).
Rachitis (Rickets).
Scorbutis (Scurvy).

ORDER 4.—PARASITIC DISEASES (*Paracitici*).

Apthæ (Thrush).
Ascarides (Ascarides).
Hydatides (Hydatids).
Porrigo (Scaldhead).
Scabies (Itch).
Tænia solium (Tape-worm).
Trichinosis (Trichinosis).
Vermes (Worms).
Other Parasitic Diseases.

CLASS II.—CONSTITUTIONAL DISEASES (*Cachectici*).

ORDER 1.—DIATHETIC DISEASES (*Diathetici*).

Anæmia (Anæmia).
Anasarca (General Dropsy).
Arthritis (Articular Rheumatism).
Asthma (Spasmodic Asthma).
Carcinoma (Cancer).
Gangræna senilis (Dry Gangrene).
Hydrops (Dropsy).
Leucocythæmia.
Mortificacio (Mortification).
Noma (Cancrum Oris).
Podagra (Gout).
Podagra rheumatica (Rheumatic Gout).
Rheumatismus (Rheumatism).
Ulcus ex cubando (Bedsore).

ORDER 2.—TUBERCULAR DISEASES (*Phthisici*).

Abscessus psoasus (Psoas Abscess).
Hæmoptysis (Spitting Blood).
Hydrocephalus.
Meningitis tuberculosis (Tubercular Meningitis).
Morbus coxarius (Hip Disease).
Peritonitis tuberculosis (Tubercular Peritonitis).
Phthisis pulmonalis (Consumption).
Scrofula (Scrofula).
Tabes Mesenterica (Marasmus).
Other Tubercular Diseases.

CLASS III.—LOCAL DISEASES (*Monorganici*).

ORDER 1.—DISEASES OF THE NERVOUS SYSTEM (*Cephalici*).

Apoplexia (Apoplexy).
Atropia musculorum ingravicens (Progressive Locomotor Ataxia).
Chorea (St. Vitus' Dance).
Convulsio (Convulsions).
Encephalitis (Inflammation of the Brain).
Epilepsia (Epilepsy).
Hemiplegia (Paralysis of one side of the body).
Hydrocephalus acutus (Acute Hydrocephalus).
Hysteria (Hysteria).
Insania (Insanity).
Insolatio (Sunstroke).
Laryngismus stridulus (False Croup).
Meningitis.
Myelitis (Inflammation of the Spinal Chord).
Necrencephalus (Softening of Brain).
Paralysis (Palsy).
Paralysis agitans (Shaking Palsy).
Paraplegia (Palsy of Lower Extremities).
Tetanus (Lockjaw).
Trismus nascentium.
Other Diseases of the Nervous System.

ORDER 2.—DISEASES OF THE CIRCULATORY SYSTEM (*Cardiaci*).

Aneurisma (Aneurism).
Angina pectoris (Breast Pang).
Arteritis (Inflammation of Arteries).
Atheroma arteriarum (Calcification of Artery).
Atrophia cordis (Atrophy of Heart).
Carditis (Inflammation of Heart).
Degeneratio cordis (Fatty Degeneration of Heart).
Embolismus (Embolism).
Endocarditis (Inflammation of Membrane lining Heart.
Epistaxis (Nosebleed).
Hydrops pericardii (Dropsy of Heart).
Hypertrophia cordis (Enlargement of Heart).
Morbus valvularum cordis (Valvular Disease of Heart.)
Pericarditis (Inflammation of Membrane covering Heart).
Phlebitis (Inflammation of Veins).
Syncope (Fainting).
Varices (Varicose Veins).

ORDER 3.—DISEASE OF THE RESPIRATORY SYSTEM (*Pneumonici*).

Apoplexia pulmonalis (Congestion of Lungs).
Bronchitis (Bronchitis).
Diaphragmitis (Inflammation of Diaphragm).
Emphysema.
Empyema.
Gangrænum pulmonum (Gangrene of Lungs).
Hydrothorax (Dropsy of Chest).
Laryngitis (Inflammation of Larynx).
Œdema glotidis.
Pleuritis (Pleurisy).
Pleuro-Pneumonia (Pleurisy and Inflammation of Lungs).
Pneumonia (Inflammation of Lungs).
Pneumothorax.
Other Diseases of the Respiratory System.

ORDER 4.—DISEASES OF THE DIGESTIVE SYSTEM (*Enterici*).

Ascites (Abdominal Dropsy).
Chololithus (Gallstones).
Cirrhosis.
Colica (Colic).
Duodenitis (Inflammation of Duodenum).
Dyspepsia (Indigestion).
Enteritis (Inflammation of Bowels).
Fistula in ano (Fistula).
Gastritis (Inflammation of Stomach).
Glossitis (Inflammation of Tongue).
Hæmatemesis (Blood-vomit).
Hæmorrhois (Piles).
Hepatitis (Inflammation of Liver).
Hernia (Rupture).
Icterus (Jaundice).
Ileus (Ileus).
Intus-susceptio (Invagination of Gut).
Melæna.
Obstipatio (Constipation).
Œsophagitis (Inflammation of Gullet).

Perforatio intestini (Perforation of Intestine).
Peritonitis (Inflammation of Abdomen).
Pharyngitis (Inflammation of Pharynx).
Splenitis (Inflammation of Spleen).
Stomatitis (Inflammation of Mouth).
Strictura intestini (Stricture of Intestine).
Typhlitis.
Ulceratio intestini (Ulceration of Intestine).
Ulcus stomachi (Ulcer of Stomach).
Other Diseases of the Digestive System.

ORDER 5.—DISEASES OF THE URINARY SYSTEM (*Nephritici*).

Calculus (Stone).
Cystitis (Inflammation of Bladder).
Diabetes.
Hæmaturia (Bloody Urine).
Ischuria (Retention of Urine).
Lithiasis (Gravel).
Morbus prostaticus (Diseased Prostrate).
Nephria (Bright's Disease).
Nephritis (Inflammation of Kidneys).
Strictura urethræ (Stricture of Urethra).
Other Diseases of the Urinary System.

ORDER 6.—DISEASES OF THE GENERATIVE SYSTEM (*Genetici*).

Hydrocele (Dropsy of Testicle).
Hydrops ovarii (Ovarian Dropsy).
Metritis (Inflammation of Womb).
Morbus uteri (Uterine Disease).
Polypus uteri (Uterine Polypus).
Tumor ovarii (Ovarian Tumor).
Tumor uteri (Uterine Tumor).
Varicocele (Varicocele).

ORDER 7.—DISEASES OF THE LOCOMOTIVE SYSTEM (*Myostici*).

Arthritis (Inflammation of Joints).
Atropia musculorum (Muscular Atrophy).
Caries.
Exostitis (Tumor of Bone).
Mollities ossium (Softening of the Bones).
Morbus articulorum (Joint Disease).
Necrosis.
Osteo-myelitis.
Ostitis (Inflammation of Bones).
Periostitis.
Synovitis.

ORDER 8.—DISEASES OF THE INTEGUMENTARY SYSTEM (*Chrotici*).

Abscessus (Abscess).
Eczema.
Ecthyma.
Pemphigus.
Phlegmon.
Rupia.
Paronychia (Whitlow).

CLASS IV.—DEVELOPMENTAL DISEASES (*Metamorphici*).

ORDER 1.—DEVELOPMENTAL DISEASES OF CHILDREN (*Paidici*).

Amentia ingenita (Idiocy).
Anus imperforatus (Imperforate Anus).
Atelectasis pulmonum.
Cyanosis.
Dentitio (Teething).
Hæmorrhagia umbilicalis (Umbilica Hæmorrhage).
Natus præter naturam (Preternatural Birth).
Palatum fissum (Cleft Palate).
Partus emortuus (Still-birth).
Partus intempestivus (Premature Birth).
Sclerema.
Spina Bifida.

ORDER 2. DEVELOPMENTAL DISEASES OF WOMEN (*Gyniaci*).

Abortus (Abortiou, Miscarriage).
Chlorosis.
Climacteria (Turn of Life).
Eclampsia parturi (Convulsions in Childbirth).
Febris puerperalis (Puerperal Fever).
Graviditas extra uterina (Extra Uterine Fœtation).
Hæmorrhagia post partum (Flooding).
Mania puerperalis (Puerperal Mania).
Partus (Childbirth).
Pelvis deformis (Deformed Pelvis).
Phlegmasia dolens (Milk Leg).
Chronic Pelvic Cellulitis.

ORDER 3. DEVELOPMENTAL DISEASES OF OLD PEOPLE (*Geratici*).

Gangræna senilis (Senile Gangrene).
Senectus (Old Age).
—(Senile Debility).

ORDER 4. DISEASES OF NUTRITION (*Trophici*).

Atrophia (Atrophy).
Debilitas (Debility).
Degeneratio (Degeneration).

CLASS V.—VIOLENCE TENDING TO SUDDEN DEATH (*Thanatici*).

ORDER 1. ACCIDENT AND NEGLIGENCE.

Ambusta (Burns and Scalds).
Amputatio (Amputation).
Concussio (Concussion of Spine).
Contusio (Contusion of—).
Explosio (Explosion of—).
Fractura (Fracture) (of spine).
Gelatio (Freezing).
Ictus fulminis (Lightning).
Morsus serpentis (Snake-Bite).
Suffocatio (Suffocation).
Submersio (Drowning).
Venenatio (Poisoning by—).
Vulnera (Wounds).
Other Causes of Violent Death.

ORDER 2. DEATHS IN BATTLE (*Polemici*).

ORDER 3. HOMICIDE (*Andrephonici*).

Murder and Manslaughter.

ORDER 4. SUICIDE (*Autophonici*).

Submersio (Drowning).
Suspendium (Hanging).
Venenatio (Poisoning by).
Vulnera (Wounds).

ORDER 5. EXECUTION (*Demiotici*).

Suspendium (Hanging).

APPENDIX D.

Article. I.

REPORT OF THE SARNIA INVESTIGATION COMMISSION, *RE* AN OUTBREAK OF ENTERIC (TYPHOID) FEVER.

Toronto, May 9th, 1882.

To the Chairman and Members of the Provincial Board of Health:

Gentlemen,—In compliance with the request of the Provincial Secretary that your Committee should obtain information with regard to the sanitary condition of towns in the West, where, from the level nature of the land, miasmatic and other fevers would be most likely to prevail; and further to report upon drainage, sewerage, and disposal of sewage generally, so that from statistics so obtained, the Board, at its inaugural meeting, might be better able to judge what advisory information, relating to the best means to be employed for the preservation of public health, the Board should order to be printed for general circulation throughout the Province of Ontario; and having been informed that Typhoid Fever was more than usually present in the town of Sarnia and vicinity, your Committee judged it advisable to select Sarnia as the first place of enquiry. For the facilities afforded your Committee for conducting this investigation, by the city authorities, medical men, and inhabitants of Sarnia generally, we have to express our thanks, and further to state that the hearty spirit evinced for rendering every aid was sufficient to convince us that in the promotion of public hygiene, the residents of the town of Sarnia will always be in the van.

A brief investigation sufficed to convince us that at the time of the establishment of the water-works, some oversight had been committed. To these we will briefly refer.

The progressive spirit of the inhabitants of the towns and cities of Canada demands all modern improvements inside their houses. They ask for water supply and waste pipes in all directions; but, if adequate sewerage is not provided simultaneously with the water supply, the surroundings of the houses must become impure.

The increased use of water is justly regarded as one of the most valuable agents in contributing to comfort and luxury; but it must not be forgotten that it brings with it more risks, and demands the most careful attention, since the more water we dilute our sewage with, the further it will penetrate through pores, and diffuse itself through the soil unless let off in proper channels, to places whence it cannot return and poison the inhabitants. Filth must be carried away as fast and as far as possible.

There has obviously been a deficiency of lateral drains, provided for the due carrying off of pollution at the time of establishing the water-works; and, as a consequence, there is reason to believe that soakage from privies and cesspools has found its way into the wells.

This soakage may frequently have contained the germs of Typhoid and other epidemic diseases, present in the excreta of patients. The general consensus of medical opinion at the present day points to specific germs as the sole factors of Typhoid, Diphtheria, Scarlet Fever, etc., etc.; and that malaria, while unquestionably the cause of Remittent and Intermittent Fevers, has little or no influence in the genesis of Enteric (Typhoid) Fever

While, then, it is of great consequence by drainage of land to remove the exciting causes of the former, it is of still greater importance that the sources of drinking water should be absolutely pure, for water, contaminated with these germs may look as pure as ever, and taste as cool and refreshing, and yet contain the seeds of disease.

Entertaining these views, and they are those of the profession, not only on this continent, but also in Europe, we could not but regard with alarm the close neighbourhood of the *debouchure* of the main sewer in George Street, with the source of water supply for the pumping house, the current of the river at that place being greatly diminished by the projecting Point Edward.

But, further, account must be taken of the fact that the comparatively stagnant Bay water holds a large quantity of decaying vegetable matter and refuse from the shores in solution, and is consequently malarial; that the water-closets of the gaol and county buildings, as also of several private residences, drain into it, and that water from an open ditch, proceeding from a low, alluvial district, also enters.

It cannot, then, fail to be admitted, that with these probable factors of disease enumerated; also with the opening of the George Street sewer, containing a large amount of town sewage, and in addition, that of outlying country, opening in near proximity to the water supply, that the apprehensions of very many of the inhabitants concerning the source of the water supply, were not entertained without reason.

The Council of Sarnia, admitting the probability of the correctnesss of these views as to the origin of the unusual prevalence of Typhoid, had submitted a plan, designed by an able Detroit sanitary engineer, to the ratepayers for adoption, but as it involved an amount of cost that was considered beyond their ability to meet, the carrying out of this most essential measure for the arrest of disease was for a time abandoned.

A modification of this plan in the way of removing the George Street sewer, and substituting one some blocks farther down the river, but still continuing the present site of water-works, was, we were informed, under consideration by the Council at the time of our visit.

Bearing in mind the character of the Bay water, as before described, your Committee cannot consider such a modicum of improved sanitary precaution as at all equal to the exigencies of the case.

The purest source of supply would be from Lake Huron, two miles distant, but as water obtained from this source might involve an expenditure entirely beyond the financial ability of the residents, we would recommend that the water should be conveyed by conduits from high up the St. Clair side of Point Edward, or, otherwise, the water-works removed there. The permanence of the purity of water from this source of supply would, of course, depend on the point of land remaining as at present, unoccupied for purposes other than as a coal depot for the Grand Trunk, since, immediately the land was taken up for residences, manufactories or slaughter-houses, pollution of the stream would, of course, commence.

To suggest a system of sewerage, disposal of sewage, and pure water supply, based only on a knowledge of localities obtained in two days, and within the compass of a Report of this kind, would be impossible; every city or town must be the subject of study by a competent engineer; and such a one we would recommend the Council to employ, in order to determine the cost of procuring the water supply directly from Lake Huron, as we conceive that the source from the St. Clair side of Point Edward would only be for a few years free from pollution.

There are a few points we consider it to be our duty as members of the Provincial Board of Health to impress upon your honourable body:

1st. That sewage should always leave a city or town within twelve hours at most after its generation, and that it should never be retained long enough to become decomposed.

2nd. That in all instances of an unusual prevalence of Typhoid Fever, there are unmistakable evidences that something is wrong in the sanitary condition of the community reporting it; and that baneful influences are at work, demanding investigation, and, if possible, removal.

3rd. That the universal experience of the profession points to epidemics of Typhoid as being the result of defective drainage, to the presence of sewer gases, to germs of the disease carried by water from privies, cesspools and water-closets into either wells or the mouths of main sewers, entering into rivers or lakes in close proximity with the pipe from the *pumping-house* supplying the town or city with drinking water.

4th. A large proportion of cases can be traced usually to local origin; or, in other instances, to where sporadic cases occur in individuals who, with the germs of the disease in their system, have come to visit friends at a distance, and where, from ignorance of the necessary precautions, the attendants of the sick person have not only failed to disinfect the excreta of such patients, but have also deposited them in privies or water-

closets, instead of burying them in the ground
sources of water, or storage of milk supply.

5th. When any epidemic breaks out in town, e
such cases would be the appointment by the Local Board
Sewage, as also a Health Officer, who should be a medica
jealous watching that due regard is paid to the observance
laws, should see that privies, instead of being pits in the grou
receptacles, which should be emptied in trenches, their contents t
disinfectants, and subsequently with soil to the depth of several in
during a season of epidemics should be monthly or oftener.

6th. In the third proposition it was stated that epidemics of Typ
attributed to defective drainage, to the presence within houses of sewer ga

This being the case, we consider it therefore advisable to recommend
the use of water-closets in the house is resolved upon, the pan-closet be
avoided; Latham, in his work on Sanitary Engineering, very correctly speaks
as cumbrous appliances which cannot be introduced into a house without crea
nuisance; the Hopper closet is but little more expensive, and far safer. Care mu
taken that the waste pipe from every sink, bath, or lavatory, the overflow pipe fi
any cistern, and every pipe for carrying off waste water, be furnished with a syphc
trap, which ought to be taken through the external wall of such building, to a trapped
exterior sewer—the said exterior sewer having a shaft or pipe not less than two inches
and a half in diameter, communicating with the outer air above the eave spouts of the
dwelling.

7th. The functions of Local Boards of Health should be the investigation of undue
sickness and mortality, and, as far as possible, the providing of remedies for such
sickness.

In accordance with the enactments of the present municipal law, it is competent
for local Boards of Health to ask from city or town councils an appropriation for sani-
tary purposes. Such an appropriation, in our judgment, would suffice for a mitigation
of existing faulty arrangements, pending the thorough change in the system of sewerage,
and the disposal of sewage which, for the health of the inhabitants, it is desirable should,
as quickly as possible, be effected.

That the general feeling of the citizens of Sarnia will be in favour of prompt action,
we entertain no doubt; the mere fact of their neighbours, on the opposite side of the
river, enjoying complete exemption from a preventible disease, cannot fail to forcibly
impress upon them the immediate steps requisite for procuring that which is the very
best inducement for new comers to settle in their very desirably situated town, viz., the
reputation for pure air and pure water—the two most important factors of health.

To Drs. Stockwell, senior and junior, as also to the Health Officer of Port Huron,
your Committee desire to offer their most sincere thanks for the courteous reception
accorded them, as also for the great facilities afforded them for becoming acquainted
with the advanced system of hygienic precautions enforced on the citizens, and with
the various details of the yearly bills of mortality. The following are the notes taken
at the time of our visit:

Notes re the Outbreak of Enteric (Typhoid) Fever in Sarnia, taken April 15th, 1882.

1. *Sewerage.*—In the year 1870, and before that time, there were occasional
very mild cases of Typhoid Fever. The present drainage system was the result of
constant additions to sewerage drains during the past twelve years. There are at pre-
sent three main sewers emptying at the water's edge—one at the foot of George Street,
one at the foot of Cromwell Street, and one at the foot of Wellington Street.

The George Street main sewer is about one mile in length, and is the oldest. It
runs parallel with George Street, and between George and the next street. Between
Milton Street (which runs at right angles to George) and the river the sewer is covered;
above Milton Street it is nearly all open, small portions only, at different points, being
closed.

The backs of the houses on George Street are all at the edge of the open portion of the George Street sewer; so that all the refuse from these houses is allowed to accumulate in the sewer, and may be seen floating along in the sluggish current of the stream, or collected in places along the edge of the water. The fall in George Street sewer is ·40 (5 in. in 100 ft.) The covered portion is 36 inches wide, and 30 inches high; the depth of water running through this portion of the sewer is 5 inches, and the current is slow. There are about forty-nine water-closets between George and Wellington Streets, and a great many of these empty directly or indirectly into the George Street sewer.

At the wharf at the foot of George Street may be seen the sewer water mixing with the water of the bay. Near the mouth of the sewer—about thirty feet away—is the water-works engine-house, and the water supply pipe passes out very near to the mouth of the sewer.

Cromwell Street drain is 30 inches wide, and carries a stream of about 5 inches of sewerage.

Wellington Street drain is about 24 inches by 20 inches.

There are several *laterals* emptying into George Street sewer—for instance Vidal Street drain, 12 x 14 inches, into which 9 water-closets empty; Christina Street drain 8 x 8 inches, into which 5 water-closets empty. This latter drain is old and in some places rotten, and has very little fall; quicksand also penetrates into the drain. Into Richard Street drain 2 water-closets empty.

Lochiel Street drain is 12 x 12 inches, and should empty into the river. The fall, however, is directed towards the upper end of the drain.

There are ventilators for the sewers in some places at the corners of streets, but without any charcoal beds.

2. *Water Supply.*—In 1876 the present water-works were established. At that time a warm discussion occurred as to the best point from which to draw the water supply. The advocates of pure water were municipally defeated. The medical profession in Sarnia advocated the obtaining of the water supply from the current of the river where the water was pure.

The owner of the property where the water-works are at present built was at that time a member of the Council, and his views prevailed. The engine was accordingly placed at the foot of George Street where it now stands.

The pipe conducting the water supply passes out parallel with the outlet of the sewer at the foot of George Street and very near to it, passing out into the river a distance of two hundred feet from the mouth of the sewer.

By reference to the diagram a downward bend appears in the pipe. This bend was not in the pipe when originally laid. At first the pipe extended forty-five feet out into the river, at a depth of twenty-two feet from the surface of the water.

When the pipe was in this position—in the year 1879 or 1880—an ice jam occurred which ploughed up the bed of the river under the water supply pipe and broke it off at the commencement of the downward bend. The new pipe was added from this point (*a*) to point (*b*), and the pipe extended to its present distance—190 feet into the river.

At the end of the pipe is a strainer, as shown in diagram, pointing upwards from the bed of the river fifteen feet, and reaching within twenty-nine feet of the surface of the water.

Whatever river current there may be is admitted by all to be deep, while the reflex eddy current included by Point Edward is principally superficial.

It is supposed that the weight of the pipe beyond the bend has a tendency to cause a separation of the joints in the portion under the wharf, so that a leakage occurs, allowing the sewerage to enter the supply pipe. This, however, was not investigated.

The river is over one mile wide where the supply pipe is situated, and the main current appears to come from the elevator on the American side across to *the whirlpool* on the Canadian side, below the elevator at the foot of Confederation Street, where a malt-house is built.

The current is somewhat diverted, apparently, by Point Edward, and prevented from coming directly across to the foot of George Street, being thus thrown out beyond the centre of the river. (*Vide* plans.)

There is consequently an eddy caused around the water supply pipe, into which are received the stagnant waters of the bay, enclosed by Point Edward.

This bay contains malarial water, and on the stones of the shores may be seen refuse from sheds and stables. The soil on the shore of the bay is loose and sandy near Point Edward, but near Sarnia it is rich black muck.

3. *Typhoid Fever (Enteric).*—Since 1870 Typhoid Fever has been increasing. In 1878 there was a larger number than usual of cases of Typhoid Fever, many of these presenting abundant characteristic symptoms, while some were fatal. They occurred in what was then called the South Ward.

In 1879 a terrible epidemic commenced in the latter part of August, and continued until the New Year, 15 per cent. dying.

In 1880–81 there was a severe epidemic of Typhoid Fever, continuing through the winter, when the thermometer sometimes registered 18° below zero.

Since 1879 there have been cases of fever during every month of the year; the greatest number occurring in the fall.

The majority of these cases appeared between Wellington and George Streets; all occurred in Wards 1, 2, and 3; while one case lately was in the 4th Ward, it being that of a mother who lived in the 4th Ward, and went to attend her daughter who was sick in the 2nd Ward. After the recovery of the daughter the mother came home, and was sick in bed of Typhoid Fever.

There are at present over forty cases of Typhoid Fever, while the population is estimated at between 4,000 and 5,000. There are besides these some cases of *incipient* Typhoid and Diarrhœa.

Diarrhœa is a frequent complication of the Typhoid, while there have been several fatal cases of *perforation*. By the kindness of Dr. Fraser we were shown a case of Fever on Christina Street, which exhibited the most characteristic symptoms. *Petechiæ* covered the chest, neck, and abdomen, and *sudamina* were seen in abundance, temperature 103⅗ in the morning, *subsultus, delirium at night, dry tongue*, and *tympanites*. These symptoms were present on the thirteenth day. Cases quite as severe as this were common.

On the corner of Vidal and George Streets we saw three cases of Typhoid Fever in a small frame house. One patient was a child about ten years of age covered with *petechiæ*, and also showing large numbers of *sudamina*. This was pointed out as a house in which Typhoid Fever had existed for months, although they did not use water from the water-works.

We examined the premises and found water in the privy-vault within two feet of the ground. The George Street sewer (covered at this point) crossed the next lot, just on the other side of the fence. The well was about fifty feet from the privy, and about the same distance from the sewer. It was stated by the occupants of the house that there was no cellar, but that if a hole were dug six feet into the ground water would rise in the hole about two feet in a few hours. The soil was a loose, sandy loam. The well was sixteen feet deep and bricked up at the sides, while the people drank the water. New-comers appeared very susceptible to the Fever.

One house on Lot B, London Road, was pointed out to us as a house in which there has been Typhoid Fever ever since the water supply pipe was extended to it. Before that time a case of Fever had not been known in it. The occupant of this house, partly at his own expense, had the water pipe extended to his premises for his own convenience. No other house in the vicinity had either water supply or Typhoid.

A house receiving no water supply, occupied by the informant, situated also on this street, and on Lot A, north of London Road, and only a short distance from Lot B, was free from fever, and had always been free from it. The soil is dry, sandy, and easily drained in this locality.

4. *Port Huron.*—We also visited Port Huron, and had an interview with Dr. Stockwell, who takes a great interest in sanitary reforms, and who said that they have water-works costing $175,000. The source of their water supply is at a part of the river above Point Edward where the current passes the American shore at the rate of six miles an hour, at the point where it comes out of the lake directly, and where the river

is narrow, being about 500 feet wide. The water supply is pure. A portion of the town is drained by natural means. There is a bed of twigs about fourteen feet below the surface of sandy soil with a substratum of clay. There are two brick sewers—one 1,500 feet long, and one 800 feet long, with *laterals*.

In 1854-5 they had an epidemic of Cholera or Diarrhœa, but with this exception have had no epidemics. They have had no epidemic of Typhoid Fever; have had no cases exhibiting petechiæ, sudamina, tympanites, or iliac tenderness. Dr. Stockwell, Jr., had one case of Typhoid Fever with *perforation*, at a point some distance out in the country, two or three years ago. Occasionally, in the fall, they have Typho-malarial Fever, but these do not show symptoms indicative of Typhoid Fever.

At present they have not one case of Typho-malarial Fever, and never had in Dr. Stockwell's recollection any in the spring.

At the request of Dr. Stockwell we visited the water-works, and found everything in fine order, the works yielding $2,000 or $3,000 profit above expenses.

5. *Addenda.*—In answer to the opinions urged by some of the inhabitants that it was not correct to assign the city water supply as the sole cause of the Typhoid prevailing in Sarnia, inasmuch as cases had occurred in a Ward, the inhabitants of which depended solely on well-water for drinking and other purposes, we would reply that from information obtained we are in a position to state that the soil in this Ward is clay, excepting one or two limited areas of sandy soil in the northern part of the Ward, consequently soakage from privies, cess-pools or stables would not be likely to occur, especially as we learned that the wells were 10 to 40 feet from the houses; privies were 20 to 100 feet from the houses, and about the same distance from wells; while the stables were 40 to 50 feet from the houses, and there were very few in the Ward.

This Ward is drained by open ditches into a small creek running through it and sloping toward the river. There are no soil pipes in the Ward.

We have the honour to remain,
Yours truly,

Charles Wm. Covernton, M.D.,
H. P. Yeomans, M.D.

The following is a copy of the endorsation by the Board of the Report of the Commission, a copy of which was forwarded to the Mayor and Town Council of Sarnia:—

Moved by Dr. Rae, and seconded by Dr. Cassidy, "That the members of the Provincial Board of Health, having given careful attention to the Report of Drs. Covernton and Yeomans on the prevalence of Typhoid Fever in Sarnia and the reported causes thereof, concur in the views of those gentlemen that, in order effectually to remove the causes that in their judgment have been the essential factors of the disease, the source of water supply, instead of being at the present spot—subject as it is to the impure waters of the bay—should be brought by conduit from Lake Huron, a distance, we are given to understand, of two miles. The waters of St. Clair river, from the west side of Point Edward, would, it is true, for a period of a few years, probably furnish a sufficiently safe supply; but as there is reason to believe that, within a comparatively short space of time, the village of Point Edward may extend to too close a proximity to the stream from whence the conduit may proceed, it would be better to fix the source at once at a point beyond reasonable doubt as to purity. The plan suggested of bringing the water from Lake Huron, would, we are aware, be attended with considerable expense, and also that of a conduit carried from the St. Clair side of the Point Edward would require to be placed at a depth sufficient to prevent its being injured by vessels at anchor, or even by vessels of deep draught passing in the course. The third proposition, namely, that of continuing the use of the sluggish water of the bay, even if the existing sources of pollution were carefully removed, could not be recommended by us from a sanitary point of view. The only way for the waters of the bay to be used with any degree of safety would be by the carrying of a main trunk drain from the head of the bay, which, in addition to carrying off the sewage from all water-closets and other

sources of pollution, should also drain the township ditch running parallel with Exmouth Street—said drain emptying below the Whirlpool. Any other expedient would in our judgment fall short of accomplishing the object which our report was intended to subserve. Dependance upon by-laws that might be enacted, however minutely and carefully they might be framed, with the object of preventing the fouling of the bay water, would, we conceive, be open to objection, as it is notorious that frequent evasions of such laws take place. Nothing short of a trunk sewer running from the head of the bay to a point at which a competent engineer would pronounce as absolutely secure from the danger of sewage being carried back by the reflex current that, it is admitted, starts from the point of land at which the tide from the American side strikes the Canadian shore, could in this case be recommended. This precise spot would of course be more likely to be correctly designated by the residents of the place than we could presume to do."

The members of the Board would also recommend that the whole system of sewerage and disposal of sewage be remodelled under the charge of a competent engineer.

ARTICLE II.

REPORT OF COMMISSION APPOINTED TO REPORT UPON THE MALARIA EPIDEMICS IN COBOCONK AND MADOC.

To the Members of the Provincial Board of Health:—

GENTLEMEN,—Your Committee having been authorized by the Government to make a visit of enquiry to the above-named places, journeyed first toward Coboconk by way of Fenelon Falls, it being necessary that the Balsam River, with its locks at Rosedale, be examined.

Having crossed the "narrows" between Balsam and Cameron Lakes by a drawbridge, your Committee interviewed the oldest inhabitant of Rosedale, a rather remarkable old man who, amidst all the vicissitudes in the history of the place, had for sixteen years kept the village post-office with a blind energy (he was sightless) characteristic of his race and northern blood. He informed us that he had never had ague there, and that in fact he had seen much more in Mariposa, where he had previously lived, though it had been considered high, dry, and healthy. Having further interviewed another inhabitant by means of a self-sought introduction to the landlady of the village inn, your Committee found that there had been some fever in the neighbourhood last year, but none of a severe type. Indeed from the appearance of lake and narrows there was every reason to believe that Rosedale is an exceptionally healthy neighbourhood.

Driving thence some eight miles your Committee reached Coboconk, a village situated for the most part on an island in the Gull River, there being in addition houses here and there on either, but mostly on the east river bank. On the west bank there is a large saw-mill, managed by a Mr. Gould, in the interest of the Dominion Bank.

The river has a dam, at the upper end of the island in the east channel, in which there is a slide for running down timber. In the west channel there is also a dam, situated at the lower end of the island, but at a higher level than the one on the east. There is consequently but little water running over it, a lagoon in fact being formed on the west side of the island having sluggish water. When the water is drawn off at the upper dam this lagoon becomes quite shallow, and so much was this the case during the latter part of the summer of 1881 that they were unable to pump water into the mill by the pipe laid out into the river.

The question of the prevalence of malaria in Coboconk seems to be an urgent one, since, for several years past, almost every inhabitant of the village has been affected, while those living two or three miles away have been quite free from it, as were also the villagers up to two or three years after the establishment of the saw-mill on the west bank, when the ground around the mill having been covered with sawdust, the latter

was thereafter thrown into the river along its edge, and has been increasing year after year until, as your Committee was informed, the deposit is now over 100 feet out into the river, extending up and down the bank for 100 yards or more. As a matter of course, this organic matter has decayed and is decaying, and of late years, since much bass-wood has been sawn, the stench from the decomposing sawdust has been extremely offensive.

The pretty river is situated between banks sloping gently up from the river, with limestone of the Trenton formation cropping out along it. This is the case for several miles up the river, with the exception of a small swampy place on the west bank above the mill 100 yards or more, and covering an area of five or ten acres. This swamp, however, is mostly so dry that rank vegetation, such as willows, reeds and marsh grass, covers its surface. The river below the village has the same kind of banks, and can be affected in level only to a small extent since between it and the locks at Rosedale is the wide expanse of Balsam Lake. These are the principal facts in the topography of the village. The question of causation of the malaria seems then to resolve itself into two points for consideration: (*a*) What influence does the small swampy area on the west bank exert?; (*b*) What foundation is there for the popular opinion that the decomposing sawdust is the potent agency?

Any other theory, as for instance a malarial wave from some meteoric condition, may be dismissed on the ground of the epidemic being wholly localized, and this too in a neighbourhood with a possible *causa morbi*, not elsewhere found in the vicinity.

With reference to the first possible cause it is doubtless true that, in a dry season, which would cause this low ground to become for the greater part dry, there would be conditions present which would favour the propagation of the *bacillus malaria*, or the germ of malaria, whatever that may be, in case it be once present. However, the influence of a wet season upon this swamp would not seem to be very considerable, since the height of the water during any year is largely regulated by the dams.

In any case, however, the vegetation in the swamp is so rank as to prevent in a large degree the free development of malarial germs, and moreover, whatever theory may suggest, we have the fact, as given by the inhabitants, that the dams have been on the river some twenty-five years and that this area has been swampy during all that period, but no malaria had occurred until a year or two after the saw-dust began to accumulate around the mill, and especially along the banks and in the water of the west channel.

As to whether the presence of decomposing saw-dust in large amounts is a sufficient explanation of the prevalence of malaria in this locality would seem to be beyond reasonable doubt, from the fact that its chemical composition is of much the same nature as the vegetable mould of the prairie, which when exposed to the air and decomposing is known to be the cause of the widespread prevalence of malarial diseases. In addition to this fact we have many well known instances where malaria had been practically unknown in districts until such time as the saw-dust from mills had been exposed to the action of the atmosphere for several years, when decomposing it generated gases similar to those of organic compounds in general, and forming as we must suppose a favourable *nidus* for the development of malaria germs.

At Fenelon Falls the saw-dust of the mills there had been spread out over the open common, and left to decompose. Malaria followed, but later on a kiln was built in which all the saw-dust has since been burned, a great decrease in the prevalence of malaria following as a result. The popular idea seems to be that basswood saw-dust is more dangerous to health than pine saw-dust. This may be true on the supposition that the turpentine and resin of the pine exerts some preservative or anti-septic influence. Again no malaria occurs along the Gull River until some sawmills, seven miles above Coboconk, are reached, when it re-appears. The same fact has been noticed in the neighbourhood of sawmills on the river Moira, as we were informed at Madoc.

In a word we may say that decomposing sawdust is but one of the conditions under which the full development of miasmatic diseases is most readily brought about, *i. e.* if we accept the ideas in an article in the Annual Report of the Connecticut State Board of Health, which says: "All writers admit wet soil, marshy land and decaying organic substances are factors in producing malaria."

Concluding then that in these conditions we find a cause for the remarkable prevalence of malaria in the village, we naturally ask what remedies must be sought.

1st. It is evident that any permanent improvement must depend upon the disposal of the saw-dust in some other way than here adopted, such as using it for fuel for the engines of the mill or burning it in a kiln. The council of the township of Bexley has already ordered Mr. Gould, the manager of the mill, to desist from further disposing of the saw-dust in the present manner; but he has paid no heed to the commands, on the ground that Mr. Graham, the Fishery Inspector of the District, says that the present mode of disposal of the saw-dust is not contrary to the clauses of the Fishery Act, inasmuch as it is not thrown into the main stream.

As we have seen, however, the west current is as much a part of the river as the east, hence the offender can be reached under the clauses of the Fisheries Act. Moreover, should this Board support the opinion of the Local Board of Health in its belief in the effect of decomposing saw-dust in the production of malaria, if not as the cause, yet as aiding the development of the cause, this would then seem to be good reason for prosecuting Mr. Gould or the Company as "creating a nuisance" as within the meaning of the Municipal Act.

Should the present method of disposal of the saw-dust be prevented, we are not, however, to suppose that malaria diseases would cease at once, since the large amount of saw-dust already accumulated will require a considerable length of time before, under ordinary conditions, its present injurious effects will have been neutralized. It is quite possible, however, that its baneful effects would be rapidly lessened were the dam on the west side of the island either lowered or completely removed, thereby causing a rapid current to carry away more or less of the saw-dust along the bank.

According to a motion passed at the last regular meeting of the Board, your Committee was directed to take steps for the elucidation of the question of the influence of saw-dust in causing malaria.

Having procured water from the Gull River at the point where the deposits of saw-dust are made, specimens were sent to Dr. Sheard for purposes of experiment.

The following is a copy of his Report:—

REPORT OF CHARLES SHEARD, M.B., PROFESSOR OF PATHOLOGY, TRINITY SCHOOL OF MEDICINE.

To the Committee of the Provincial Board of Health:—

GENTLEMEN,—The water from Gull Lake sent me, and which I received September 25th, 1882, has been duly examined, and the following result I beg most respectfully to submit:—

The water was first placed in a tall glass cylinder, and allowed to remain for twenty-four hours at the ordinary temperature of the air, 75° F. On examining it at the end of twenty-four hours, a thick brown sediment was observed to have formed, occupying about one-fourth of the cylinder. The supernatant fluid was carefully poured off, and found to contain albumen. About half a drachm of dry albumen was obtained from six ounces of the water. On microscopic examination of the supernatant fluid, it was found to contain nothing but granules from vegetable debris and woody fibre.

A portion of the sediment left behind in the cylinder was next examined microscopically, and found to contain a large quantity of woody fibre, various specimens of vegetable cells, and also spores. A portion of the sediment was next placed in a test tube containing pure glycerine. After remaining for about half an hour the supernatant fluid was poured away, and the small portion retained was found to contain the spores almost entirely freed from woody fibre or debris. The spores thus obtained were of two distinct kinds.

(*a*) *Conferræ.*—Imperfectly formed but readily recognizable as purely vegetable spores and possessing low vitality.

Such spores are frequently met with in decomposing water, especially when

taken from soil overgrown with mosses or low grasses. I do not consider them of any importance apart from indicating impregnation with vegetable matter.

(*b*) Spores entirely different from confervæ or other known vegetable spores.

These I will give a detailed notice of. They were about $\frac{1}{3\,5\,0}$ inch in diameter, oval or circular in shape, and showing transverse markings. They were capable of spontaneous movement—the activity of their movements depending on the hygrometric condition of the atmosphere.

When kept for some time in hydrocele fluid or serous fluid at a temperature of 90° F., the activity of their movements was greatly increased. They then showed granules in their interior. Many of these granules were large and circular, resembling somewhat the developing spores seen in congregating confervæ.

When a small portion of the hydrocele fluid, containing the above mentioned spores was placed in a test tube so as partially to fill it, and the test tube closed with a rubber cork and kept for twenty-four hours at a temperature varying between 80° F., and 90° F., and subsequently cooled to 40° F. or lower, the spores were found to be deposited in contact with the upper portion of the test tube, showing that with moderately high temperature they could be driven off and by a low temperature deposited again on a cold surface.

Again, on taking a few of such spores thus deposited on the tube and placing them in hydrocele fluid, kept at a temperature of 80° F. or 90° F. for from three to six days, the spores were then found to be increased in number, and large circular masses seen in them in great abundance, proving beyond a doubt the vital state of these minute animalculæ and also that with high temperatures, in a favourable medium they underwent rapid reproduction. I adopt hydrocele or any serous fluid, knowing it to be one of the best media to facilitate the reproduction of albuminoid spores, and also to avoid the introduction or origination of foreign germs from the air and other sources, which takes place when spores are kept for any time in an aqueous medium.

Two small rabbits were placed in a cage containing a portion of the sediment from water which was kept at 80 F., in order, if possible, to produce impregnation of the air with these spores, as had been done in the experiment of the test tube. The experiment was continued for two weeks, but without any influence upon the constitutional states of the rabbits.

The experiment with the rabbits was continued for two weeks, and performed in a small room about 9 x 7 feet, and was not concluded until all the water supplied, together with the sediment, was completely dried up (being about twelve ounces of water containing about four ounces of moist saw-dust sediment); and although the room was occupied by me at least three hours each day during that time I failed to show the slightest traces of malarial influence. To be brief I would sum up the results of the experiments as follows:—

1. The water is impregnated with vegetable phytozoa demonstrable by the microscope.

2. Spores were discovered capable of *reproduction*, *movement* and *dissemination* by means of changes in atmospheric temperature.

3. There is no absolute proof that these spores (although corresponding in some respects in their dissemination to the dissemination of malarial miasm) are capable of producing malaria.

I would also say that I strongly believe the spores mentioned to be capable of exerting zymotic influence; and am strongly of the opinion that had the amount of sediment in the water been large enough to generate a sufficient number of spores, the room in which such was kept, at a moderately high temperature, would ultimately become malarious.

I have the honour to be,

Yours faithfully,

Charles Sheard, M.B.,
Professor Pathology, Trinity School, Toronto.

From Dr. Sheard's report it will be seen that no definite results can be said to have been proven; but quoting his opinion "that had the amount of sediment in the water been large enough to generate a sufficient number of spores, the room in which such was kept at a moderately high temperature would ultimately become malarious," your Committee feel that the experiments, along with the array of facts stated by them, showing the probability of the saw-dust deposits being the *vis agendi* of the malaria epidemic amply justify them in the statements and recommendations which they have made.

Madoc Investigation.

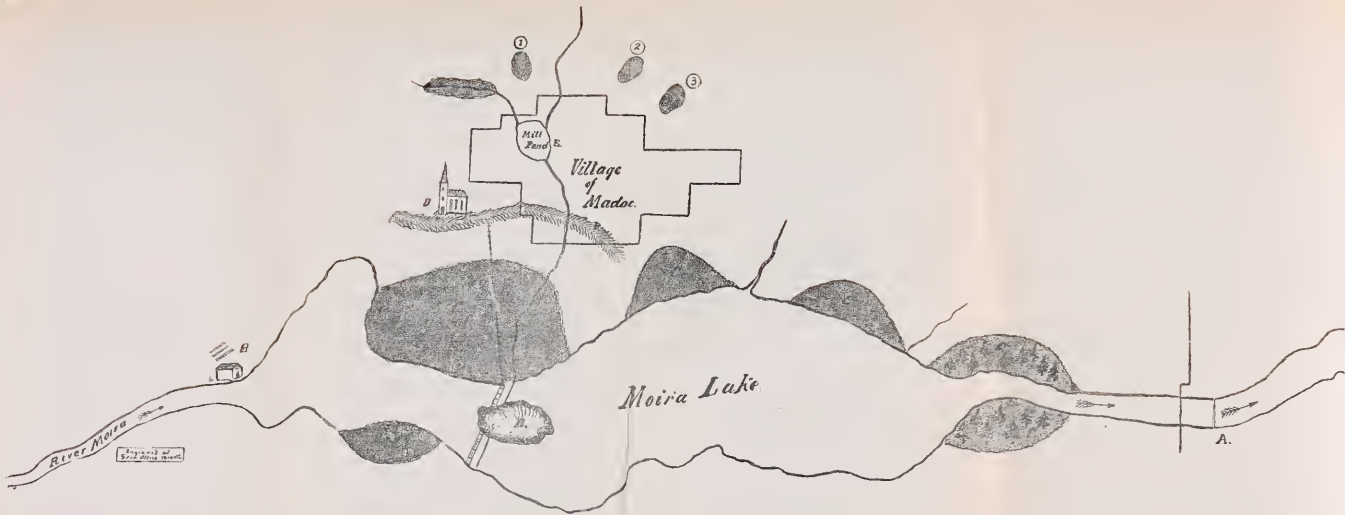
The village of Madoc, where there also exists a wide-spread epidemic of malaria, presents on the other hand another quite different phase in the question of the cause of malaria.

Before proceeding, however, to discuss the various points in the Madoc epidemic, your Committee desire to express their pleasure with and appreciation of the kind reception accorded them, not only by Mr. E. D. O'Flynn, the active and urbane Secretary of the Local Board of Health and Clerk of the village, but also by the members of the profession, Drs. Loomis, Sutton and Dafoe, as well as many others, among whom may be mentioned the Rev. Mr. Wishart and Mr. Wood, warden of the county. Every facility, in the shape of detailed information concerning the topography of the village and surroundings, was given your Committee for the pursuit of its investigations, and so completely are the villagers *en rapport* with this Board that your Committee feels assured of their aid and co-operation in whatever practical scheme may be suggested by it for the remedy of the existing state of affairs.

In order to present to this Board something like a complete idea of the problem which presented itself to your Committee, it will be necessary to give a brief *résumé* of the health of the village, in respect to malaria, during the past few years. We were informed by the Rev. Mr. Wishart, that, when in 1856 he settled in Madoc, the district was much more swampy than at present—a usual occurrence, indeed, in all our new settlements. He further remarked that, notwithstanding this, no ague prevailed for years afterwards. In the year 1877, however, a dam was built on the river below Moira Lake at (a), *vide map*: and that in that year, or the year after, ague appeared in several families living upon the island (b) in the river. These, he remarked, were very ill. This dam raised the water of the river some four feet, causing much land (c.c.c.c) to be overflowed and to remain for several years drowned land. The lake surface that season showed the presence of much vegetable matter, many fish dying at the same time. In 1878 malaria extended itself to the settlers living south of the lake gradually during that summer, and the next spreading to the inhabitants of the village; and in 1880–81 his family, which live on elevated ground (d) were all much afflicted with it. He asserts that there had been no malaria in the district until the dam was built. Every summer has seen the water largely retreating from the drowned land and from the marshes 1.2.3 (*vide map*).

During the past years these marshes to the north and east of the village have for the most part dried up; but even with their presence in this condition there had been no malaria.

In addition to these marshes there is in the centre of the village a small mill-pond, an expansion of the two creeks which unite in it, made by a dam, situate at (e). Along the west creek is a small area of wet land now covered with rank swamp grass and willows caused by the damming back of the waters. Further, the village is situated upon the gneissoid strata of the Laurentian formation, and so has an impervious bed along which the water necessarily drains to the lower levels, as also whatever sewage may soak into the soil. The *malaria area*, extending itself some two miles in breadth along either bank of the river, is confined to the neighbourhood, excepting at Peterson's saw-mill, some five miles away, where a few cases were known some twelve or fifteen years ago; while at Marmora, up the river in a north and west direction with high dry river banks, malaria appeared some years later than at Madoc, and again at Doloro it has this year been as bad as last. In 1881 much of the fever was of a *typho-malarial* or *remittent* type.



PLAN OF VILLAGE OF MADOC AND VICINITY.

Such then are the principal facts concerning the topography, and the prevalence of malaria up to the time of the enquiry by your Committee. We can readily see that the question as to what is the prime factor in the causation of malaria here is one of some difficulty, and your Committee believe that it will be found that several agencies are at work.

The village authorities have readily admitted that its sanitary condition is bad, that privy-vaults, cesspools and stables must have their fluid contents draining from the higher to the lower portions of the village, where the water is noticeably bad.

Another fact noted is that of the influence of the water of the mill-pond upon the height of that in many wells in its neighbourhood. It has been particularly noticed that the water in these wells varies in height correspondingly with that in the mill pond. Now should the borders of the pond be, as undoubtedly from its position they might be, a favourable *nidus* for germ development it can readily be seen how the infiltration of its waters through the soil and cleavage planes of the rock might be the means of polluting the drinking water with malarial germs as well as with sewage and other organic materials. Not only this, but its area though small, is from its situation particularly favourable for the spread of its super-ambient atmosphere over the village, while the change of the water level by evaporation, and its gradual retreat leave it during summer a more or less stagnant pool with odours not at all agreeable or healthful.

The small swamps (1, 2, 3), already referred to, from their situation and condition would not seem to be in any great degree factors in explaining the presence of malaria.

We now come to what in the opinion of the majority of people in Madoc is the chief *causa morbi*, viz., the extensive surface of swamp formed by the drowned land marked *c. c. c.* on the map. It was still wet in many places when your Committee saw it, and abundant swamp vegetation was everywhere present. There was also much decaying timber, logs and stumps of trees, either cut, or which having been killed, have gradually fallen. The past summer having been wet, the surface of the swamp was not relieved of its surface water so much as it would have been in a season such as the dry summer of 1881, either by evaporation or the gradual falling of the river.

The river was, when seen by your Committee, within its banks, but this, we were informed, was due to its having been lowered, through the dam having in 1881 been partially blown up by some unknown person.

Now, before we suggest any possible means for remedying the evil along the Moira in this district, we have to consider in how far this swamp area has to do with the causation of malaria.

We have several apparently well ascertained facts, viz. :

1. That there is a pretty well defined area extending probably four or five miles along the river, and two or three miles back from it on either side, in which malaria prevails.

2. There is an outer area comparatively free from malaria.

3. We have the fact of the presence of small swamps near the village, and of a mill-pond in it without any epidemic of malaria having been present.

4. The building of the dam some six or seven years ago, which caused a great rise in the river, with the result that much land along the north bank was submerged for varying periods during the year.

5. That the first cases of malaria occurred on an island in the lake, and that thereafter it spread to the south of the river first, where there were no swamps to any extent.

6. That thence it extended to the north shore.

7. That since the blowing up of the dam, some months ago, the water of the river has retired within its banks, the marshes having in consequence been mostly free from much standing water, unless in the spring of the year, and the river water has become purer, and the village freer from malarial diseases, according to the report of Mr. E. D. O'Flynn, Secretary of the local Board of Health, than during any previous period since they first appeared.

These facts having apparently been completely established, we must revert to the inferences naturally to be drawn from them.

After a careful consideration of all the bearings of the question your Committee have arrived at the following conclusions :—

1. That in view of the fact that the unsanitary condition of the village from the presence of the aforesaid mill-dam and the many ill-regulated cesspools and privies, tending to pollute the air and contaminate the wells, would increase and aggravate malarial diseases, even though not causing them, it is imperatively necessary that these several sources of evil be removed.

2. That assuming from the many accumulated facts that the drowned land, from overflow caused by the building of the dam, which raised the river water at least four feet, has been the great exciting cause of the malaria, your Committee consider that some one of the following plans might be carried out, with the intent of lessening if not wholly removing the evil.

(*a*) Reducing the river to its former level by the removal of the dam, thereby freeing the drowned land from the danger of overflow. This, by allowing the swamp to dry by natural processes, or better, by aiding these by drainage, would it is fair to conclude, cause malarial diseases largely to disappear—as has in a measure followed the partial blowing up of the dam.

(*b*) But another plan has suggested itself to your Committee, viz., the building of a dike along the whole river front of the drowned lands. This proposition is to be considered on the grounds that the Local Board of Health has informed your Committee that there would be great difficulty, in their opinion, in purchasing the mill-dam from the Trust and Loan Company of Toronto, which, they are informed, intends re-building the dam. Supposing, however, that this difficulty can be got over, another presents itself in the fact that the rear portions of three or four municipalities border on the lake, and that these being much broken, thinly settled, and hence not inclined to spend money in this direction, the village would have to bear the whole expense, which it is felt the rate-payers would not be inclined to do.

This proposition of building a dike having, however, the same and probably greater difficulties in the matter of expense, it need only be considered upon the supposition that the owners of the mill-dam, in legal possession of their right to keep up the dam, refuse to come to terms with persons wishing to purchase it.

In addition to the building of a dike, thereby keeping the flat land from being flooded, drains would be required to draw off the water from the swamp. These latter however, it is thought, could have sufficient fall only in the dry period of the summer and early autumn months.

The various practical conclusions which have suggested themselves to your Committee, were, according to the motion of this Board, transmitted by its Secretary to the local Board of Health of Madoc, with an enquiry as to what that Board thought possible to be done in the matter of remedying the evils arising from the village cesspools, privies, and the pond situated in its centre, and also as to whether any agreement could be arrived at for the purchase of the mill-dam.

The following is a copy of the letter received from E. D. O'Flynn, Esq., Secretary of Local Board of Health :—

Madoc, September 27th, 1882.

Dear Sir,—Our energetic Board of Health have had under consideration your partial Report, under date of the 11th inst., of the causation of malarial diseases in this locality. In reply, the Board are of the opinion that they could find a remedy for questions one and two (*re* the improvement of the nuisances within the village limits) of your Report ; but cannot see their way so clear to dealing with No. 3. Building a dike would be impracticable ; as to purchasing the dam from the Wallbridges (previous owners) the Board has reason to believe that the property is now out of their hands, and belongs to the Trust and Loan Co., head office in Toronto ; and that even if the Company were willing to sell it at a reasonable figure, there would be difficulties in the way of purchase. The village covering only a small area of that affected with malaria, and being already overtaxed would not be likely to submit to the additional burden, which the purchase of the dam would necessitate. The rear of three or four other muni-

cipalities border on the lake; but those portions being much broken, thinly settled, and some not being noted for their liberality would, it is presumed, not be willing to share in the expense of purchase.

The ordinary height of the river, the dam being absent, would admit of sufficient fall for the drainage of the marshes. The absence of the dam would entirely remedy the evil as to question 3. Since the lowering of the dam by Prof. Dynamite a few months ago, the marshes are drained, and the water of the lake purer, and freer from miasmatic indications than at any corresponding period since the dam was built; and it is also noticeable that within this time there has been an abatement of malarial fevers.

It is said that it is the intention of the Trust and Loan Co. to rebuild the dam, which if done and allowed to remain will be to invite the return of the Hydra-headed monster, malaria, with all its wasting and destroying influences. As the residents of this village and vicinity have been sorely tried during the past five years by a disease which like the plague that passed over ancient Egypt leaving one dead in every house; and having being severely taxed in doctor's bills, enfeebled in health and shattered in constitution, the Board are of the opinion that it has now assumed such a serious aspect, and become so important a matter that the Government should deal with it.

Yours very sincerely,

E. D. O'Flynn,

Secretary.

Secretary Provincial Board of Health, Toronto.

We thus see that the conclusions arrived at by the Madoc Local Board of Health force upon this Board the consideration of a very wide and important question, viz.:— Of how far it may be deemed wise to make recommendations to the Government for the introduction of legislation such as may give increased facilities for dealing with matters which affect the health of a large district of country. The questions which this investigation bring before this Board resolve themselves into the following:—

1. How far the vested rights of the individual are to become secondary to the public interest in matters of health. The principle that they are to be so considered is already affirmed so far as the question of drainage is concerned in clause 54, chap. 30, of the Revised Statutes of Ontario.

2. How far it is the duty of Municipalities to proceed, unaided by the General Government, in undertakings involving the expenditure of considerable or large sums of money in remedying evils brought upon them by the legalized acts of individuals in some cases outside of such Municipalities, or whether in cases similar to those the provisions of the clause above referred to should be brought into requisition.

3. How far it becomes incumbent upon the Government to introduce legislation whereby in municipal improvements, affecting the public health, the various neighbouring Municipalities may be called upon to assess themselves for the payment of such improvements. It seems to your Committee imperatively necessary that when private individuals and companies obtain certain grants and privileges in such matters that clauses should be inserted in their leases, deeds or charters, requiring them to build dikes or otherwise adopt such measures as may be recommended by this Board for protecting not only the property but the lives of the many whose interests are involved.

We have the honour to be your obedient servants,

J. J. Cassidy,
Peter H. Bryce.

ARTICLE III.

REPORT OF THE COMMISSION OF INVESTIGATION INTO THE OUTBREAK OF TYPHOID (ENTERIC) FEVER AT STRATFORD.

TORONTO, October, 20th, 1882.

To the Chairman and Members of the Provincial Board of Health.

GENTLEMEN,—On the 11th October, I was asked by your Chairman, Dr. Oldright, to investigate the cause of an outbreak of Typhoid Fever, at Stratford, Ontario. I went to Stratford next day (12th instant) and immediately placed myself in communication with the Mayor of the town, Mr. David Scrimgeour. That gentleman introduced me to Mr. Thomas Horn, Chairman of the town Board of Health, Mr. H. B. Wilson, Health Officer, Mr. Burritt, Clerk of the County Court, and some other gentlemen interested in municipal matters.

Accompanied by Mr. Burritt, I proceeded to examine one of the affluents of the River Avon, which has received the not unmerited title of "Stinking Creek." This creek flows through the town in a south-easterly direction, and receives about two-thirds of the town sewerage. A branch of this creek receives a certain number of private drains. This creek, or open sewer, has a very slight fall, and consequently the refuse matter, which is poured into it requires removal about twice a year. I was informed that the brick sewers discharge surface water, house drainage and the overflow of several cesspools into "Stinking Creek." Also that those brick sewers traverse the two principal business streets, and receive the drainage of the principle hotels, stores, etc. I was informed by Mr. Horne that recently unpleasant smells used to find entrance to the houses along these two principal streets; but since the house drains have been trapped complaints of this kind have ceased. The proprietor of "The Windsor," where I stopped, informed me that the water-closets in the hotel were flushed from a tank, that they were trapped, and that they discharged into a cesspool, which was also trapped on the house side and ventilated; also that the cesspool was drained into the street sewer, the solid excrement which sank to the bottom, being removed by night-soil men every quarter. No cases of Typhoid Fever were reported from this portion of the town.

Accompanied by the gentlemen mentioned above, I drove over to the infected portion of the town. I was informed that a large mill pond in the north-east portion of the town, which I noticed *en passant*, received only a few private drains. Arrived at the north-west end of the town I found the fever cases located in two blocks, bounded on the east by John Street, on the west by Avondale Avenue, on the north by Hibernia Street, and on the south by Norman Street. I proceeded at once to examine John Street sewer, which receives several private drains, and finally discharges into the River Avon. John Street runs in in a direction 30° west of south, and ends at the river bank. This stream, the Avon, is at John Street about fifteen feet wide, from fifteen inches to two feet deep, flows with a pretty rapid current, in a south-westerly direction, and empties into the Thames about three miles north of St. Mary's. The latter town, which is the first on the stream below, is about twelve miles from Stratford. On examining the sewer I found it to consist of a square box made of oak planks and pine scantling. The oak occupied three sides of the square, the fourth side, or bottom, was occupied by the scantling, which held the frame together. These pieces of scantling necessarily impeded the force flow of sewerage and formed a number of miniature cesspools every six feet along the course of the sewer. The inside area was 2×2 feet. At the street corners intersecting John Street, culverts were placed leading down to the sewer. I did not observe any discharge, fluid or solid, at the mouth of the sewer. I was informed later on, that the construction of the sewer was considered faulty inasmuch as it had not been graded so as to fall steadily towards its mouth. This defect was said to arise from the fact that the height of land which bisects John Street prevents a steady fall in the sewer towards the Avon, that position to the north of the height of land finding

its natural drainage in the opposite direction. One of the workmen who had been engaged in the building of this sewer, confirmed the above statement by the remark that when the sewer was being built the water flowed back on them till they reached the height of land, after which it flowed naturally down to the stream. In opposition to this view, the Health Officer showed, by sinking a pole into the culverts, that at no place was there a greater depth of fluid in the sewer than four inches, which might be easily accounted for by the presence of the 4 x 4 scantling previously referred to. The general opinion seemed to be that above the height of land the fall, if any, was very small. I did not get the opinion of any engineer on the question, and the gentlemen who accompanied me did not furnish any other means than mere ocular inspection by which I could decide the question. I shall therefore reserve my opinion about this feature of the John Street sewer until I receive more reliable information.

I was also informed by the gentlemen already referred to, that this sewer received only surface water and house drainage; but testimony received later on from Mr. Sheriff Hossie, rebutted this; for that gentleman mentioned two instances in which, to his certain knowledge the overflow from cesspools drained into the sewer. The house drains connected with this sewer were not trapped.

Dr. D. B. Fraser informed me that he had ten cases of Typhoid Fever in this locality with no deaths. The fever was of a severe type and of the true enteric variety. He considered the foul emanations from the John Street sewer the principal cause of the disease. He stated that the untrapped drains allowed foul odours from the sewer to find entry to the dwellings and yards. Some of the drains connecting directly with the houses, others opening on the yards. In some instances there were no drains. Some of the cases in Dr. Fraser's opinion might have arisen from impure drinking water, Drs. B. M. Fraser and Robertson agreed with their fellow practitioner in referring the causation of the fever to the foul condition of the John Street sewer.

On the following morning I visited this fatal spot, where four deaths had already occurred and others were momentarily expected. The houses occupied by the sick people were clean looking cottages, surrounded by gardens. The air was pure and refreshing, all nature seemed to smile, and yet people were lying ill with a deadly disease on every side. In order to clear up as much as possible the question of causation, I selected four samples of drinking water from four different wells in the neighbourhood and ordered them to be sent by express to Mr. Heys, Analytical Chemist, of our city. I enclose his Report, which as I expected shows that the well water used by people in houses where fatal cases had occurred, contained sewerage, and was unfit for drinking purposes.

The soil in the infected locality is stiff clay with a substratum of blue clay, at a depth of eight or nine feet. The privies were in all cases near the wells, in some cases about twenty feet away.

From a consideration of all the facts of the case, I am inclined to the opinion, that the outbreak of Typhoid Fever referred to may be traced to two causes, in the foul condition of the John Street sewer and the untrapped and unventilated house drains; and the use of contaminated drinking water connected therewith. As Enteric fever has during previous years prevailed in the same locality, it is probable that the same causes have been responsible for the former outbreaks.

The following is a copy of the letter forwarded by your Committee to Thomas Horne, Esq., Chairman of the Board of Health, Stratford, to which is appended a copy of the analysis of samples of water analysed by Thomas Heys, Esq., Public Analyst:—

Toronto, October 20th, 1882.

To Thomas Horne, Esq.,

Chairman of the Board of Health, Stratford, Ont.

Sir,—According to my promise, I telegraphed you the results of the analyses of the four samples of well-water. In Mr. Hey's opinion they all contain sewage matter, and are unfit for drinking purposes. It is quite likely that they are not peculiar in this respect, as the custom of sinking wells and privy-pits close together in the same yard is followed

pretty generally throughout the country. Still, in estimating the causes which are likely to produce Typhoid Fever, the condition of the drinking water used in the infected portion of the town, had to be considered, as outbreaks of the dreaded disease have frequently been traced to contamination of the water supply with excrementitious matter, and more particularly with the excreta of patients suffering from Typhoid Fever.

Emanations arising from choked up or badly constructed sewers are also considered causative of the disease in question, whereas fermentative changes are taking place in the sewers, and more particularly where the excreta of Typhoid Fever patients are cast into them. Therefore, when both of these causes work together in any locality, *i.e.*, when emanations from a sewer which receives the overflow from cesspools, pass unchecked into houses and yards through untrapped drains, and when drinking water, polluted by night soil, is in daily use, it is quite reasonable to expect that Typhoid Fever and kindred diseases should prevail. The poison of Typhoid Fever enters the system by the lungs or by the stomach. In endeavouring to prevent its spread, it is necessary therefore, not only to disinfect the sick room, to destroy excreta, etc., but to remove the causes of the disease, viz.—impure drinking water and foul sewers. In order to prevent, as far as possible, its recurrence in your town, I would recommend that the following precautions be adopted :—

1. That pure water be obtained for drinking purposes.

2. That until it has been obtained, the water used for drinking purposes be boiled and filtered.

3. That privy-pits and cess-pools be discarded for the earth-closet or some similar inexpensive plan.

N.B.—In the State of Mississippi, the earth-closet system is obligatory; the contamination of well-water is rare.

4. That the privy-pits and cesspools in the infected localities be disinfected with sulphate of iron (3 lbs. to the gallon of water), when emptied of their night-soil and filled with earth.

5. That any house drains at present in use be so trapped as to prevent the entry of sewer gas into the houses. As a temporary expedient a trap for a box drain might be constructed as per following diagram :—A, is a three inch vent tube running up to the roof by the lower wall, and preventing sewer gas from forcing the trap CC ; B is a drain from the sink ; CC birch trap, partially divided by a board D. The water remains in the trap C C, and prevents the gas from passing into the house.

6. That the sewer be flushed especially in dry weather.

I do not purpose to enter fully into the question of sewers in this letter, it being one which demands much consideration. The suggestions which I offer are likely to be of use if put in practice during the present emergency, and if attended to in future are calculated to prevent the return of the disease which has already proved so destructive. Hoping that with the blessing of Providence your town may be soon relieved from the dreadful scourge with which it is at present afflicted,

I remain, Sir, yours faithfully,

J. J. Cassidy, M.D.

Report of Water Analysis.

To Dr. Cassidy, Provincial Board of Health, Toronto.

Dear Sir,—In accordance with your instructions I have made an examination of the four samples of well-water received from Stratford, Ont., marked as in margin, and beg to report as follows:—

		Dougherty.	Salvage.	Couch.	Middlemich.
Appearance		Slightly turbid.	Clear.	Clear.	Turbid.
Colour		Yellow.	Slight tint.	Yellow.	Slight Tint.
Odour		None.	None.	None.	None.
Total Solids	grains per gallon	37.	32.	37.	32.
Volatile matter	grains per gallon	13.	7.5	8.	16.
Chlorine	grains per gallon	2.1	2.1	2.45	2.80
Free Ammonia	parts per million.	.06	.5	.60	.146
Albuminoid Ammonia	parts per million.	.08	.112	.07	.10
Total Oxidizable matter	parts per million.	3.20	1.60	2.00	1.60
Oxidizable Organic do	parts per million.	3.20	1.20	1.00	1.60
Nitrous Acid	parts per million.	None.	1.15	2.87	None.
Sulphates		Trace.	Trace.	Plenty.	Trace.
Phosphates		None.	Present.	None.	Trace.

I found a large amount of vegetable conferv\u00e6 and spores, with water eels, in the last one, and more or less in the others. They all contain sewage matter and are unfit for drinking purposes.

Yours respectfully,

Thomas Heys.

Article IV.

REPORT OF THE LAMBTON MILLS COMMISSION ON THE OUTBREAK OF TYPHOID FEVER IN THAT VILLAGE.

To the Members of the Provincial Board of Health:—

Gentlemen,—Your Committee having been requested to investigate the outbreak of Enteric (Typhoid) fever in this place, visited the village on the 14th of November, and met there C. Smith, Esq., proprietor of the extensive woollen manufactory and Mr. Howland, by whom they were introduced to the members of the township council of Etobicoke, the Local Board of Health within whose jurisdiction lies the village of Lambton. After a short preliminary conference with these gentlemen, your Committee proceeded to make an inspection of those houses in which cases of Typhoid Fever had occurred. The village of Lambton is situated for the most part along one main road passing through the village, and crosses by a bridge the River Humber in a general east and west direction. A considerable portion of the village is situated on the slopes and at the foot of the hills on either side of the river. That portion of the village where all the severe and fatal cases of disease occurred lies near the edge of the high ground, the rear of the lots, situated on one side of the road, running completely back as far as the edge of the declivity. To make this more plain the following diagram has been prepared showing the position of the infected houses.

Your Committee first visited the house No. 1., occupied by the young man Clayton, who had died, and found as will be seen, the privy situated on the edge of the embankment. The water used by this family was obtained from the well higher up the bank

and situated in the adjoining premises. Visits were then made to houses marked II. and VIII., where, at the time, were lying cases of fever—one case in No. II. and two in No. VIII. Thence they proceeded to the residence of Dr. Beattie, through whose kindness they obtained the following accurate details:—

CLASSIFICATION OF CLINICAL FACTS—As far as Obtained.

——	Weir.	Ashmans.	Humphries.	Scott.	Escourt.	Veitch.	Clayton.
Taken sick		James, (19 Aug.) Walter, (26 Aug.)	15th Sept.	10 Sept.	Oct. 9th.	1st Sept.	10th Sept., (at Waubashene.)
Recovery		Aug. 30th.				Recovered slowly.	
Death	Nov. 13.		13th Oct.	13 Oct.	Nov. 9th.		20th Oct.
Probable time of Inoculation			1st Sept.	26 Aug.	26th Sept.	15th Aug.	20th Aug.
Previous condition			Diarrhœa for preceding six weeks.				
Mucous Rales in chest		Present.	Present.				Present (family consumptive).
Hemorrhage			None.				None.
Diarrhœa		Walter.	Present.				Present.

PERIODS OF ONSET OF THE DISEASE COMPARED WITH THE RELATIVE POSITIONS OF INFECTED HOUSES.

1. Ashmans moved out of No. VII. one week before James took sick, and 14 days before Walter sickened.

2. Weir moved into the same house, No. VII., two weeks after the moving out, viz., about 26th August, sickened in end of September.

3. Humphries, living in No. VI., sickened—(seen by doctor 15th September)—had had Diarrhœa for six weeks previously.

4. Scott sickened September 10th in No. V., probable inoculation, August 26th.

5. Escourt living in No. IV., next to Scott, sickened October 9th, died November 9th.

6. Veitch, living in No. VII., sickened 1st September.

7. Clayton, living in No. I., sickened September 10th at Waubashene, came home 24th September.

HOW EMPLOYED AT TIME OF ILLNESS.

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After the consideration of all of these points, so apparently contradictory, the solution of the problem resolves itself into the three following questions:—

1st. Whether the water of the wells could in any way have been the cause, they being so favourably situated for receiving sub-soil water which had previously, as surface water, carried into the soil much organic matter from the back-yard slops which have been regularly thrown out from the houses?

2nd. Whether from the excreta from the first cases thrown into the privies, germs of Typhoid Fever may not have been borne into the air and inhaled, so causing fresh cases, and this especially in contiguous houses, the privies of which are under a common roof?

3rd. Whether the decomposing offal of the slaughter-house, so favourably situated for the dissemination of the gases and effluvia of decomposition, may not have been the chief predisposing cause, and the reason why the disease assumed such a grave character?

With regard to the first question, your Committee felt that it could not arrive at any definite conclusion until an analysis of the well-water had been made.

As to the second, your Committee thought it to be in accordance with generally received views on the causation of Typhoid Fever to assume that the disease had spread by the inhalation of germs from the excreta cast out into the privies, and from washings of the body-linen being thrown out in the yard.

As regards the third, we considered ourselves justified in stating that the odours from the slaughter-house have been a most important factor in explaining why the various cases took on such a malignant character. This conclusion would seem to be strengthened by the fact that the two brothers, Ashman, who had moved just previous to their sickness from No. VII. into a house at a considerable distance from the slaughter-house, recovered.

Your Committee having arrived at these conclusions, decided upon several recommendations which it made to the members of the Local Board of Health:—

1st. To have an analysis made of the water of the several wells, and if impure, to proscribe its use until the wells have been thoroughly cleaned, and in the meatime to use other water from known healthful sources.

2nd. That in view of the excreta from the privies on the brow of the hill being possible sources of contagion, it would be advisable to have them disinfected by solutions of Sulphate of Iron, and thereafter removed, and to have some form of dry earth system employed hereafter; and to urge the friends of persons now affected or convalescent to pay strict attention to the instructions of their medical attendants in regard to disinfection of the excreta.

3rd. That measures be taken for the immediate removal before decomposition of the offal from the offending slaughter-house; or, the removal of the slaughter-house itself from the village to some location at such distance from it as would make danger from noxious effluvia impossible.

It may be mentioned that your Committee visited the woollen factory and found proper precautions taken against danger from emanations from its water-closets—the excreta therefrom falling immediately into the swift-flowing water of the mill-race, and being thus carried away.

A sample of water from the wells before referred to was sent by the township council to Dr. Ellis, of Toronto, Public Analyst, and certain facts have been supplied by him in the following letter, which it will be well to lay before you:—

Toronto, 30th November, 1882.

Dear Sir,—I have examined the sample of water sent me by Mr. Evans from Lambton Mills, and find it to contain 62.2 grains of total solid matter to the gallon, including chlorides in the proportion of 9.2 grains of chlorine to the gallon. This is a very large proportion of both solids and chlorine.

The water does not appear to contain much impurity of an organic nature.

I am, Sir,

Faithfully yours,

W. H. Ellis.

W. Oldright, Esq., M.D.,
Chairman Board of Health.

This report still leaves some suspicious circumstances in doubt: the causes of the large amount of chlorine and of total solids.

The amount of chlorine may be due to one of two causes: the sewage contamination, or the existence naturally of a large amount of chlorides in the water of the locality.

The following remarks made by Dr. C. B. Fox, a celebrated authority on water analysis, when speaking of the water from a "shallow well at B's—Gay Bowers"—will be of value by way of illustration in a comparison with the water of the wells at Lambton Mills:—

"As urine and sewage contain a large amount of chlorides, the presence of five or ten grains of chlorine per gallon in a water is a suspicious circumstance in such localities. Good natural waters contain on an average from .7 to 1.2 per gallon."

The words "in such localities" must, however, be borne in mind.

Further, in the analysis given us by Dr. Fox, the *free* and *albuminoid* ammonia he shows to be present in large amounts; while in the analysis of Lambton Mills' water Dr. Ellis informs us that organic impurity is not present to any large extent. This statement is somewhat reassuring, but not entirely so, as it may be possible for urine and slop-water percolating through the soil, (the wells have only been dug about a year), to lose much of their organic matter, and still retain chlorides and typhoid germs.

The case of the epidemic at Lausen, in Switzerland, is a notorious example of this possibility. It will be remembered that in that instance the contaminated water of an adjacent valley, after percolating through the gravelly hill intervening between this valley and the public reservoir, still retained its potency to cause a fearful epidemic of Typhoid, and retained also its chloride of sodium, although no trace could be found of granules of the finest flour which had been mixed with it.

Your Committee is therefore of opinion that the only way for the people of Lambton to be perfectly satisfied is for them to request Dr. Ellis, who had the analysis in hand, to go out and examine the water of some of the natural springs, and compare it with that of the wells, and to make such further tests, by the microscope or otherwise, as shall be necessary for the accurate determination of the question.

In the meatime your Committee believes that its recommendations have been carried out in so far as regards the disinfection of the excreta, and of course, in the analysis of the water reported above, and they trust that the other recommendations will also be followed.

All which is respectfully submitted.

P. H. Bryce.

Article V.

REPORT REGARDING SEWERAGE, DISPOSAL OF SEWAGE, AND WATER SUPPLY IN TORONTO.

To the Members of the Provincial Board of Health:

Gentlemen,—Since the last meeting of the Board, it became my duty, as a citizen of Toronto residing in the neighbourhood of Sherbourne Street, and interested in the removal of certain sanitary defects in that vicinity, to attend a meeting of the Board of Works at which the question of reconstructing the Sherbourne Street sewer was to be considered. At that meeting the City Engineer and certain members of the Board broached schemes of such extent and importance to the health and well-being of the city, that I have thought it desirable for me, as your Committee on Sewerage, Disposal of Sewage, and Water Supply, to make them the subject of a special report.

Several localities in the city have become very offensive by reason of sewage discharging into channels which were originally natural watercourses, but which have now become foul open sewers. The chief of these are the University Creek, the lower portion of Garrison Creek, and an old watercourse crossing the eastern ends of Queen and King

Streets, and running down past St. Lawrence Street; one or two others of less importance might be included in the same category. In the cases of the

University and Garrison Creeks,

the evil has become so great that legal action is contemplated to prevent any further additions to the amount of sewerage connecting with these channels, and to remove the offensiveness which already exists. A portion of the sewage of Yorkville runs into the University Creek. A large portion of the north-western part of the city and suburbs has no provision in the way of drains for carrying off sewage and storm water, and a portion of that which is sewered has no other outfall than the Garrison Creek already referred to. These points will be better apprehended by a reference to the accompanying map which the City Engineer was so good as to furnish.

With these facts before them, those members of the Board who are not familiar with the subject of the Sewerage of Toronto will the better understand the following remarks and recommendations of the City Engineer :—

"I would recommend to the serious consideration of the Council the question of the construction of a sewer on the line of the so-called Garrison Creek, from, at all events, Queen Street to the Lake. Very strong comments have been made upon the fact of sewage being allowed to find its way into the open stream running through the University grounds, and there is no question but that steps should be taken to prevent the continuance of this, or to provide a proper means for the removal of the sewage. But if this is looked upon as a pressing necessity, surely the arguments must be strong in the case of the Garrison Creek, taking as it does in an open channel, through a built up and well populated district of the city, the drainage of a sewered area of nearly five hundred acres."

"If the work were undertaken, it would be necessary to construct a sewer of sufficient capacity to remove all the water collecting on the area to the north draining into the valley of the stream, and it would be proposed to make the outfall into the Lake to the west of the Old Fort. By adopting this outfall, the present winding channel towards Bathurst Street, and amongst the various railway tracks, would be entirely got rid of; and it is thought beyond question that the Railway Companies would be willing to contribute well towards such a work, since it would relieve them from all fear of flooding, and do away with the present network of wooden culverts amongst the tracks.

"In the very near future, drainage will have to be provided for the newly laid out lands lying between Bathurst Street and the present western limit of the City; and it is thought not unreasonable to look forward at no very distant date, in connection with the proposed extension of the City limits, to the building up more or less thickly of the whole area north of Bloor Street. The natural lie of the ground in both these cases will necessitate, it is considered, the construction of a Main Trunk Sewer through the valley of the Garrison Creek, north of Queen Street.

"The present sewers running north and south, with their outlets, are taxed to their utmost limit, as evidenced by the flooding on Queen, Bathurst, and other streets at certain times, and the frequency of these floodings will be increased as the localities become more thickly built up, paved, and drained, by which the rainfall is concentrated and thrown more rapidly upon the sewers.

"By the construction of a Main Trunk Sewer through the valley of the Garrison Creek, an outlet would be secured for intercepting sewers along Bloor Street, one from the western City limit and the other from the east at the University Creek, cutting off all the water to the north; and a way would also be provided for intercepting along College Street the sewers running north and south between Queen and Bloor Streets, when the necessity for such arises."

The condition of the

Sherbourne Street Sewer

and its vicinity has been more than once a subject of reports from the City Engineer and other officials. In his last report the Engineer thus referred to it :—"The Sherbourne Street Sewer, between Queen and King Streets, as at present constructed, is

not of sufficient depth to intercept the stream that crosses the street near Britain Street —the stream passes under the sewer. I am of opinion that sooner or later this will cause trouble and loss, besides being, from a sanitary point of view, indefensible." Your Committee would add that this little streamlet (once large enough to allow of the passage of row-boats from the Bay, it is believed), discharges itself in ordinary times through a half-choked box drain; but it has on several occasions become dammed back so as to convert back yards and gardens into green stagnant pools, highly suggestive of low fever, and rendered more unhealthy by soakage of made soil. This is in the heart of one of the most thickly populated districts of the city. A by-law to construct a sewer to remedy this unsanitary condition was a short time ago defeated by the selfishness of a few property-owners, coupled with the forgetfulness of the great majority, and their ignorance of the condition referred to, the question not having been canvassed to the same extent as the merits of the candidates at the late election. The small vote cast being no indication of the wishes of the property-owners, it is to be hoped that the City Fathers will be able to solve this difficulty and provide for the reconstruction of the sewer on sanitary grounds, and also that means may be taken to obtain in future a more reliable indication of the feeling of the people.

The St. Lawrence Street Nuisance

is being turned into a proper channel. Various portions of this eastern district lie very low, and are often filled with stagnant water. They will need to be raised by a system of filling in and drainage. Much low fever results from their present condition.

As your Committee, I would recommend that the Board endeavour, in every way in its power, to strengthen the hands of the City Engineer in effecting the sanitary reforms which he recommends in connection with these sewers, and in doing away with the reeking abominations of which complaint is so justly made. The scheme for the construction of the Garrison Creek and Bloor Street sewers will require all the support possible from those interested in sanitary reform; otherwise the selfish and ignorant activity of a few individuals scattered over the other portions of the city may serve to defeat it. I say ignorant, for they will no doubt ignore the fact that the condition of the western portion of the city will, in time, become a source of danger to themselves.

I know that you will be pleased to see that the City Engineer has, in connection with his department, made a recommendation, the substance of which has already been discussed and approved by members of this Board. It will be found in page 9 of his report as follows :—" With regard to the

Drains Laid from Private Premises

to connect with the sewers, I do not consider the present system of carrying on the work at all satisfactory, nor calculated to insure that thoroughness of construction which is absolutely necessary, and without which the most carefully considered specifications are of little avail. I would, therefore, beg to make the following suggestions as to the future carrying on of this work :—

" That none but those immediately under the control of the corporation be permitted to carry out this work, and that the whole of the work from beginning to end be carried on under the supervision of a competent and responsible inspector, who shall see the connection with the sewer and every joint made. This may add a trifle to the cost of the work, but its importance from a sanitary point of view cannot be over estimated; and care in the filling up of the trenches and the restoration of the roadway would be insured." Your Committee would recommend that this inspection go further, and extend to the inside drainage and plumbing work of houses, as is now the case in many other cities, the latest of which is Jackson, Florida. Your Committee would respectfully draw the attention of the members of the Board to the

System of Plumbing Regulations

lately enacted there, and which may be found in one of the June numbers of the *Sanitary Engineer*, being page 29 of the current volume. Montreal has also recently taken

action in the same direction. It is to be hoped that the cities of Ontario, with its boasted intelligence, will not be the last to adopt similar measures of sanitary protection. Your Committee could now take members of the Board to houses where there is a direct communication from the sewer into the interior of inhabited houses, pipes emitting by open mouths the sewer gases into the houses. Your Committee can show you in the City Hall pipes bringing drain and water-closet gases into the apartments they are intended to ventilate; and numerous instances in which untrapped pipes conveyed, and some in which they still convey, gases from the foul receivers of water-closets into the bathrooms of houses. The persons occupying these houses have been the innocent victims of diseases resulting from these defects. In some instances death has been the result. Surely it would pay as well, and be quite as humane and sensible, to have a competent inspector to see that in houses in course of erection death does not lurk in the drains and pipes, as it does to have a coroner contemplate the result.

Your Committee would also recommend that the Board and the individual members of it endeavour to secure the adoption of the plan of

Ventilating Sewers Overhead,

all house drains being provided with ventilating tubes, leading the gases up over the roof and clear of all doors, windows, chimneys, or other apertures of the houses. This course is now being adopted by many of the architects of the city; but to be of service in relieving the sewers of the presence of gas, and to prevent it being discharged at out feet in the streets, it must be made general. I do not wish to lengthen this report by now combatting difficulties in effecting this result. At some future time I may be permitted to show that the scheme is the cheapest and most feasible and efficacious that can be adopted.

Your Committee is aware that the attention of the members of the Board has been much occupied with the unsatisfactory mode now so common in the disposal of excreta. I refer to the

Existence of Privy Pits,

with their decomposing masses of filth, sending disease germs through the atmosphere, deteriorating the air we breathe, poisoning the soil of our habitations, and rendering our wells dangerous to use. The existence of these pits and the condition in which they are kept may be stated as one of the causes of the large amount of Typhoid Fever that has prevailed.

The Fouling of the Wells

from this and other sources (surface water, garbage, and other sources of soil pollution) seems to prevail after a time in most large communities, but in Toronto the shelving clay substratum which underlies the more porous surface soil is well known to facilitate the admixture of privy water, back-yard slops, etc., with the contents of the wells. In most wells, indeed, the water which has been filtering down through the polluted surface soil is the source of supply. It has been a matter of regret to your Committee, knowing these facts, that by-laws for extending the water mains of the city have been defeated. The same remarks as were made in speaking of the Sherbourne Street sewer will apply here. And further, the

Present Condition of the City Water

may have something to do with this result. The City Engineer has, however, strong hopes that in August we shall be drawing our water from the Lake; and this time his hopes seem to be justified by what has been accomplished in the prosecution of the works, accounts of which have recently been published in the city press. I am glad to be able to report that steps have been taken to further secure the supply against commingling with the contaminated water of the bay. The wells on the wharf—the pumping well and inlet crib—are both being lined with stout iron casings well jointed

and secured in every way from leakage from the outside. You are aware that the pipe across the Bay has been frequently tested; these tests will be continued. As soon as all is in readiness to convey water from the Lake, the pipe leading up through the cut to the Lake will, we are assured by the Engineer, be overhauled and tested as to its integrity. Without assuming the prophetic *rôle*, it may be well here to say that even after we get good safe water from the Lake, people may often need to be assured that slight turbidity, and the presence of a little clay and sand, are not evidences that water is bad in a sanitary point of view.

I have now drawn your attention to those points in connection with the Sewerage, Sewage, and Water Supply of Toronto which I thought the Board could profitably take action upon at the present time, and I have endeavoured to do so as briefly as possible. I would merely mention in addition two other schemes which the City Engineer has in view for some future time. The subject of

A Large Sewer along the City Front

to relieve the Bay of the filth daily poured into it is not a new one. The plans formerly proposed, however, were on the one hand to discharge it into Ashbridge's Bay, and on the other hand to connect it with the proposed new channel for the Don. Both these positions would be too near to the source of our water supply, Ashbridge's Bay would be converted into a foul pond, and there are other objections into which I need not now enter in detail. The Engineer hopes eventually to carry such a sewer out into deep water at a point about six and a-half miles east of the mouth of the water supply pipe, and to provide intercepting tanks to catch the more solid portions of the contents of the sewers, which can then be dealt with by the various processes known to the members of the Board. When this scheme is carried into effect it is to be hoped we will be relieved of the nuisance so often complained of as emanating from the

Sewage of the Cattle Byres

near the marsh. It will also be a matter of interest to the Water Works Committee and residents of Parkdale that so large an amount of sewage should cease to be poured along the water front.

In connection with this subject we must remember that in abolishing privy pits, whatever may be finally resolved as to the dry system of removal, some increased amount of work will be laid on the sewers, and the foulness of the Bay increased to an extent even beyond the proportion necessarily entailed by an increase of population.

The other scheme is one for carrying the

Sewage of the Districts North of the Cemetery and Necropolis Gullies

down to meet the Main Front Sewer of which I have been speaking, thereby relieving the sluggish Don of what would otherwise be poured into it.

Although these subjects are not ready for immediate action it is well that we should bear them in mind.

From the report of the City Engineer, copies of which I have placed in the hands of members of the Board, it will be seen that many of the sewers are very much silted up with mud, sand, and sewage, and are otherwise in a bad condition. A list of these is given. It is a matter of congratulation to know that the City Engineer is endeavouring to rectify these one after another.

All which is respectfully submitted.

Wm. Oldright.

Toronto, June 27th, 1882.

APPENDIX E.

Article I.

REPORT OF THE COMMITTEE ON AN IMMIGRANT INSPECTION SERVICE.

To the Chairman and Members of the Provincial Board of Health of Ontario :

Gentlemen,—Your special Committee, appointed to consider and submit a plan for the medical inspection of immigrants, begs most respectfully to report that evidences of Small-pox, Scarlet Fever and other contagious diseases, are of frequent occurrence in the cities, towns and villages of this Dominion; and that, in many instances, the origin of such epidemics is directly or indirectly traceable to contagion, communicated by contact with immigrants coming into the country to settle here, or passing through it on their way westward to the United States, or to our North-West Territories.

Your Committee is strongly of the opinion that much, if not all, of the diseases thus originated could be prevented, and the consequent anxiety, inconvenience, expense and loss of life thus entailed removed, if a proper and judicious system of immigrant inspection at suitable points was established and effectively carried out.

It is quite apparent that the attainment of so desirable an object is beset with many difficulties. In order that the inspection might be generally useful and successful, and that the expenses connected therewith might be fairly distributed over the entire country, it would be necessary that the inspectors be appointed, and the expense of the inspection be borne by the Dominion Government. The cordial and active co-operation of our leading trunk railway lines and ocean steam navigation companies, engaged in carrying immigrants, would also be necessary in order that every facility might be afforded for making the inspection as complete as possible, and for having it performed without any necessary delay on the route.

The different steamship companies engaged in carrying immigrants to the port of New York, with unimportant exceptions, and many of the leading railways in the United States, have agreed to co-operate in a system of immigrant inspection; and the following plan has been adopted by the National Board of Health of the United States, and is now in operation :

The surgeon of the ship commences his inspection as soon as his vessel leaves the European port, and he furnishes each person upon whom he finds marks of successful vaccination with a *Protection Card* or *Pass*, and he proceeds forthwith to vaccinate all persons who have not been vaccinated, and as soon as such vaccination has been successful, he furnishes all persons so vaccinated with a similar card. This card is of a convenient size, and has on the one side of it the name of the steamship, the word, *Protected*, and the signature of the surgeon of such ship; and on the other side the words, *Pass; keep this card to prevent detention at quarantine and on railways in the United States.* These cards are not taken up at the port of entry, but are retained by the immigrants, and serve as passports at points along the railway lines where inspections are made. Inspections are made at the port where the immigrant lands, and at such distributing points inland along the leading railways as may be deemed necessary. The Inspectors are all appointed and paid by the National Board of Health, under the authority of the general Government of the United States. The Federal Government also erects and maintains suitable temporary hospitals on the borders of States, and at such other places as may be necessary for the reception and care of persons whom it may be necessary for the Inspectors, in the discharge of their duties, to cause to be removed from railway trains, or other public conveyances, on account of their being attacked with Small-pox during the journey. Such persons are maintained and treated in these hospitals at the expense of the National Board of Health, or Federal Govern-

ment, until sufficiently recovered, and in a condition to be allowed by the Inspectors to proceed on their journey without danger to the public health.

Now, if some plan similar to this were adopted by our Dominion Government, and Inspectors appointed to make inspections at our principal ports where immigrants are landed, and at a few points on our leading railways; and if our ocean steamship lines, trunk lines of railway and local health authorities would actively co-operate and assist in carrying out the details of it, the expense to the Government need not necessarily be very great, and there is no doubt that the amount of benefit resulting from such inspection would far more than compensate for the outlay involved.

In the meantime, and until some steps be taken by the Dominion Government, your Committee would recommend that an inspection be made at Toronto, and at such points of entrance into this Province as may be deemed necessary in order to guard as far as possible against the introduction and propagation of Small-pox, Scarlet Fever, and other contagious diseases.

If any cases of Small-pox, Scarlet Fever, or other contagious diseases, should be found on board any railway train, or other public conveyance, they should at once be removed, and cared for in an *isolated* place until pronounced, by a competent person, to be in a condition to proceed on the journey without danger to the public health. Should any Inspector have reason to suspect the outbreak of Small-pox, Scarlet Fever, or other contagious disease on board any train, he should telegraph to the health authorities along the route of travel, in order that they might be all the more vigilant to detect and isolate any such case or cases, as soon as the disease makes its appearance. All inspections on railways should be made, where at all possible, on board of trains while in motion, so that no delay or detention be entailed on the immigrants while proceeding to their destination.

The expenses incident to such inspection would, until the establishment of a *national* system of inspection by the Dominion Government, be necessarily borne by the Ontario Government.

In regard to the expenses incurred in maintaining patients, whom it might be necessary to remove from trains while *in transitu*, your Committee would recommend either that they be *pooled* and divided *pro rata* at the end of the year, or other fixed period, amongst the Governments of the Countries or Provinces, according to the number of immigrants who settle in each; or that the expense incurred in the case of each individual immigrant might be refunded by the Government of the Country or Province in which such person intended to settle—the destination to be decided by the *ticket* of the individual.

All of which is respectfully submitted.

FRANCIS RAE.

APPENDIX F.

ARTICLE I.

REPORT OF THE COMMITTEE UPON DISEASE REPORTS.

To the Provincial Board of Health of Ontario:

GENTLEMEN,—Your Committee appointed "to consider the best and most economical scheme for obtaining reports of diseases prevailing in various parts of the Province," begs leave to report as follows:

The Chairman of your Committee waited upon the Hon. A. S. Hardy, Provincial Secretary, to ascertain whether the same concessions were likely to be obtained in regard to postage on statistics of disease, as now exist in regard to births, marriages and deaths. The matter is not yet definitely settled, but your Committee are glad to

be able to report that they have strong hopes that the said concession will be made. They believe, further, that the question will soon be decided; and whilst they would recommend that a scheme of disease reports be put in operation with as little delay as possible, they think it would be advisable to wait a few weeks, if necessary, for the said decision, as upon it will depend, to some extent, the number of reports it will be desirable to obtain.

The Chairman also had interviews with Mr. Charles Carpmael, M.A., F.R.A.S., Superintendent of the Meteorological Observatory, and with Mr. Thos. Monk, formerly connected with the Observatory.

Mr. Carpmael expressed his willingness to aid the scheme, by allowing the Board to make use of the reports received at his office, and by any other means in his power.

At present daily observations are reported from a few places equally distributed throughout the Province, and weekly and monthly reports from a larger number.

The points of meteorological interest reported upon vary in the different groups.

No observations have hitherto been made of the amount of ozone in the air. This has probably been due to the difficulty in cities that other gases interfere with the ozone tests; but your Committee are of opinion that Mr. Carpmael would be willing to institute such observations.

The Committee would take this opportunity of referring to the praiseworthy efforts of Mr. Monk, in endeavouring to collect information in regard to this subject, and of thanking him for offers of assistance, by making available to the Association anything he has already done, or any information obtained.

Your Committee would recommend that weekly reports be obtained, and that a request be made that no gentleman undertake to report unless he be able and willing to do so regularly every week, when not absent from home; and that it be suggested that he appoint a substitute to report from his locality, if he be absent.

It is further recommended that the following list of diseases be printed in the blank forms for reporting upon, a space being left for the addition of any others, which the reporter may deem of importance to be noted :—

Asthma (Spasmodic).	Goitre.
Anæmia.	Gonorrhœa.
Accidents (Railroad, Machinery, etc.)	Heart Disease, Organic.
Blood Poisoning.	Influenza.
Bright's Disease.	Insanity.
Brain, Inflammation of	Measles.
Bronchitis.	Mumps.
Calculus.	Neuralgia.
Cerebro-Spinal Meningitis.	Peritonitis (non-puerperal).
Cholera Infantum.	Pneumonia.
Cholera Morbus.	Pleurisy.
Consumption, Pulmonary.	Puerperal Fever.
Croup, Membranous.	Rheumatism.
Diphtheria.	Scarlatina.
Diarrhœa.	Small-pox.
Dysentery.	Syphilis.
Erysipelas.	Tonsillitis.
Fever, Intermittent.	Tubercular Disease (other than pulmonary).
Fever, Enteric.	
Fever, Typho-malarial.	Whooping Cough.

That the reports of the various diseases refer in separate columns to the number of cases attended during the week, the severity, and the relative order of prevalence: the severity to be marked by (+) plus; (=) equal, or (−) minus signs respectively, according as the cases, taken as a whole, have been of unusual, average, or less than average severity. The number, "1," in order of prevalence column, will indicate that there have been more cases of the disease opposite to which it stands than of any other.

"2 ¦will indicate that of which there has been the next greatest number, and so on, as shewn in a blank form hereto annexed, issued by the Michigan State Board of Health:

Diseases in

(Please Date.)

week ending Sat., *188*

No.	DISEASES.	Prevalence Order Seea	Severity. See b.	Cases
	Asthma (Spasmodic)			
	Anæmia			
	Accidents (Railroad, Machinery, etc.)			
	Blood Poisoning			
	Bright's Disease			
	Brain, Inflammation of	4	+	1
	Bronchitis	3	=	2
	Calculus			
	Cerebro-Spinal Meningitis			
	Cholera Infantum			
	Cholera Morbus			
	Consumption, Pulmonary			
	Croup, Membranous			
	Diphtheria	2	+	4
	Diarrhœa	2	—	4
	Dysentery			
	Erysipelas			
	Fever, Intermittent			
	Fever, Enteric			
	Fever, Typho-malarial			
	Goitre			
	Gonorrhœa			
	Heart Disease, Organic			
	Influenza			
	Insanity			
	Measles	1	—	6
	Mumps			
	Neuralgia			
	Peritonitis (non-puerperal)			
	Pneumonia			
	Pleurisy			
	Puerperal Fever			
	Rheumatism			
	Scarlatina			
	Small-pox			
	Syphilis			
	Tonsillitis			
	Tubercular Disease (other than pulmon'y)			
	Whooping Cough			

a. Please mark the disease of which there is the greatest number of cases, 1, the disease having next greatest number of cases, 2; the next, 3; and so on, each disease writing the same figure as opposite diseases having the same number of cases. Write 0 opposite diseases not present. A blank indicates that the item has been overlooked.

b. The sign = indicates the usual severity, + indicates more — indicates less than the usual severity.

Please mail this, SIGNED and DATED, as soon as convenient after close of week specified.

, *M.D.*

Your Committee would recommend that a blotter, corresponding to the Blank Report, be presented to each gentleman reporting.

That compilations be made by the Secretary, acting in concert with the Committee on Vital Statistics and Climatology.

That there be a weekly compilation in which shall be stated in tabular form:—

1. The number of persons reporting for the week.
2. The total order of the diseases reported.
3. Their average number.
4. The extent in order of the areas over which they prevail.
5. The average severity, and the degree of plus or minus might here be qualified by numerals.
6. Increase or decrease of severity, as compared with previous week.

7. The number and percentage of observers reporting each disease.

8. Your Committee are of opinion that it would be well to recapitulate contagious diseases in a group by themselves.

To this weekly compilation may be added any other points, or any remarks, that may be thought of immediate interest or profit.

The principal meteorological features of the week, temperature, humidity, rain-fall, winds, ozone, should be noticed, and occasionally, perhaps, barometeric pressure and cloudiness may have to be referred to.

So much of the above weekly compilation as may be thought of immediate interest should be published in newspapers in various parts of the Province.

Differences in types and prevalence of disease may at times render it desirable that different compilations for different districts should be made.

In this connection your Committee would state that they consider it very undesirable that undue publicity should be given to facts which would militate against the good name of any locality; the Board should take all possible means to lessen the sickness rate in any place, but it should be done in such a way as not to create unnecessary alarm, or deter those interested from sending in reports.

Warnings may often be given in general terms which will cause people to adopt precautions which they should in any case employ at all times.

Annual Reports of a more elaborate nature, and embracing researches on the causation of special forms of disease, should also be made. Of this kind of work some excellent examples are to be found in the Reports of the Michigan State Board, and in those of some institutions of Great Britain.

During the short period of Mr. Monck's investigation also, a few diagrams illustrative of the work, on a small scale, were made, and are in the possession of your Committee.

Your Committee would recommend that when the first blanks are sent out, a blank form be also sent for the purpose of obtaining information from the practitioners of the Province regarding causes of disease, and matters connected with vital statistics, such as it was intended to send out under the auspices of the Ontario Medical Association, before the formation of this Board.

Your Committee would also recommend that correspondence be inaugurated with the various Division, County, City and other Medical Societies, with the same object in view; also with Superintendents of Hospitals and Asylums, and with other persons and institutions in the Province and elsewhere.

All which is respectfully submitted.

Charles Wm. Coverton,
John J. Cassidy,
Wm. Oldright.

Article II.

COPY OF LETTER INVITING CORRESPONDENCE.

Office of the Provincial Board of Health,
Toronto, July 17th, 1882.

Dear Doctor,—You may have observed that the Provincial Board of Health, in common with many Boards in the United States, has decided upon publishing a Weekly Report of disease prevailing in the different parts of the Province, noting, at the same time, the accompanying meteorological and other conditions.

In order to make such reports of any real value in investigating the causes of disease, it will be necessary for the Board to appoint, in various localities, correspondents whose weekly returns may enable it to deduce practical conclusions therefrom.

To this end the Board has addressed this letter to a number of medical practitioners throughout the Province, and it requests you to consider whether you will accept the position of correspondent to the Board from your district.

Leaving out of view the bearing of the proposed work upon the question of Sanitary Science, and looking at it from a purely professional standpoint, the investigations to be

made as to the causes and nature of disease will be as important to medical practitioners as many others in which they are engaged and to which they gladly devote more time. The filling up of the blank forms will require only a few minutes each week; and should you be willing to devote that time to it, be kind enough to inform the Secretary at once, so that there may be sent to you stamped forms similar to the one enclosed, and a blotter for your convenience and subsequent reference. Should you decide that you cannot do so, you will confer a favour by informing the Board of some medical practitioner in your locality who, in your opinion, would be willing to undertake the work.

The reports and remarks of correspondents will be treated as confidential, a general average of all the reports being published, and the Board exercising discretion in mentioning the names of particular localities.

Although this work, like that of the Meteorological Reporters in Ontario and of the Disease Reporters in many States of the Union, is done gratuitously, yet this Board trusts that the measure of good accruing from this scheme will be such as to encourage it to expect, in the near future, greater pecuniary facilities for making the reports, and the results to be obtained therefrom more nearly perfect.

Trusting that you may find it convenient to co-operate with the Board in this matter,

I have the honour to be, Sir,
Your obedient servant,
P. H. Bryce,
Secretary.

Article III.

DIRECTIONS TO CORRESPONDENTS.

No. 8.

Office of the Secretary of the Provincial Board of Health,
Toronto, September 11th, 1882.

To the Correspondents of the Provincial Board of Health:

Gentlemen,—In order that the Disease Reports from this Board may be as uniform and accurate as possible it has been thought advisable to forward to its correspondents, along with the stamped blanks, the following explanations regarding the

Form of Procedure in Making the Reports of Diseases,

which have occurred in their practice during each preceding week.

1. In the column headed "Prevalence, Order," write the figure 1 opposite the disease of which there is the greatest number of cases; opposite that of which there is the next greatest number of cases, write the figure 2; opposite that of which there is the next greatest number, write 3; and thus, according to the number of cases of each disease, apply consecutive numbers to all the diseases of which there have been cases during the week for which the report is made—remembering, however, that two or more diseases of which there is the same number of cases should be marked with the same figure.

2. Write 0 opposite each disease mentioned of which there is no case. A blank indicates that the item has been overlooked; and a blank cannot therefore be compiled as a statement that there was no case of the given disease.

3. Between the lowest and highest numbers used in the "order of prevalence" column, no number should be omitted, though some numbers will necessarily be repeated, when there is an *equal* "prevalence" of different diseases.

4. Some figure should be written opposite every disease mentioned. Two diseases should not be connected by a brace opposite one figure, as this would lead to confusion and inaccuracy in compiling the reports.

5. The numbers given in the "order of prevalence" column do not show whether a disease is more or less than "usually" prevalent, or more or less prevalent than during the preceding week. Of a disease that had been marked "3" or lower in order of prevalence one week, there might be fewer cases the following week, and yet it might have

risen to "1" in order of prevalence, because other diseases had decreased more rapidly or had disappeared altogether.

6. The numbers in the "order of prevalence" column have reference only to the relative number of cases and have nothing to do with the severity, malignancy, importance, or fatality of a disease. They do not *state* the number of cases, but show simply of what diseases there were the *most* cases during the week for which the report is made, of what disease the *next highest* number, and so on.

7. To insure, as nearly as possible, accuracy, it is thought best to note the total number of cases which the correspondent knows as actually existing in his practice; but, in order to prevent inaccurate reports, care must be taken that cases are not reported after they have passed from under the oversight of the correspondent. This is especially liable to occur in the case of chronic diseases, serving thereby to exaggerate their prevalence.

8. The observer will please report the *number of cases* for the week in the column headed "cases," on the right-hand *margin* of the card.

9. The following shows the correct marking in the "order of prevalence" column, when the number of cases is as given on the margin of the card:

Diseases in

(14 Please Date.)

week ending Sat., *188*

a. Please mark the disease of which there is the greatest number of cases, 1; the disease having next greatest prevalence, 2; and so on. Where two or more diseases have the same number of cases, mark the one having the most malignant type 1st. Where 0 opposite diseases not present. A blank is inadmissible, but 0 must then have been overlooked.

b. The sign = indicates the usual severity. + indicates more, indicates less than the usual severity. Please mind this. NOTE WELL DATED. Reports are required after cases of every specified.

No.... ..	DISEASES	Prevalence. Order. See a	Severity See b.	cases
	Asthma (Spasmodic)	0	...	0
	Anæmia	0	...	0
	Accidents (Railroad, Machinery, etc.)	14	—	5
	Blood Poisoning	0	...	0
	Bright's Disease	0	...	0
	Brain, Inflammation of	18	+	1
	Bronchitis	11	=	8
	Calculus	0	...	0
	Cerebro-Spinal Meningitis	0	...	0
	Cholera Infantum	8	—	11
	Cholera Morbus	10	+	9
	Consumption, Pulmonary	10	—	9
	Croup, Membranous	12	+	7
	Diphtheria	5	=	14
	Diarrhœa	3	—	15
	Dysentery	8	—	11
	Erysipelas	13	—	7
	Fever, Intermittent	2	+	13
	Fever, Enteric	15	+	4
	Fever, Typho-malarial	9	+	10
	Goitre	0	...	0
	Gonorrhœa	16	=	3
	Heart Disease, Organic	0	...	0
	Influenza	7	—	12
	Insanity	0	...	0
	Measles	1	=	20
	Mumps	6	+	13
	Neuralgia	14	+	5
	Peritonitis (non-puerperal)	17	=	2
	Pneumonia	9	=	10
	Pleurisy	0	...	0
	Puerperal Fever	0	...	0
	Rheumatism	6	+	13
	Scarlatina	4	+	15
	Small-pox	0	...	0
	Syphilis	0	...	0
	Tonsilitis	11	—	8
	Tubercular Disease (other than pulmonry)	0	...	0
	Whooping Cough	0	...	0

..... , *M.D.*

10. In the column headed "Severity," the sign "=" denotes that the disease is of the usual severity; the sign "+" denotes more, and the sign "–" less than the usual severity. It is desirable that this column be filled.

11. It is believed that it will be interesting and profitable to the correspondent to have a classified record of his practice week by week to which he may refer at any future time. This is one object in supplying record books. They will also prove of use by enabling the correspondent to send a duplicate of any report that may have been lost in transmission, or to examine into any supposed error.

12. If by any means the postal blanks be mislaid, or anything occurs which would interrupt the weekly reports, timely notice should be given to this office, so that, if possible to prevent it, no break may occur. When an observer is to be absent from home for a short time, it would be well for him to request some other practitioner to make and forward the reports during his absence.

13. The name of the observer, the locality from which the report is made, and the week for which it is a report, should be stated on every card.

14. In order to enable the central office always to know and be able to report the condition of the public health throughout the Province, the weekly reports should be sent as soon as possible after the close of the week for which they are made; but no report should be sent before the close of the week for which it is a report.

Should experience suggest to any of the correspondents of the Board improvements in the method of reporting, the Board will accept with pleasure any suggestions which they may make; and, in the meantime, it trusts that all will endeavour by carefully following out the present plan to secure the best results which at present are possible.

I have the honour to be,

Yours very truly,

Dr. P. H. Bryce, M. A.,
Secretary.

ARTICLE V.

EXPLANATION OF THE MAP ISSUED BY THE PROVINCIAL BOARD OF HEALTH, ILLUSTRATING THE WEEKLY PREVALENCE OF DISEASE THROUGHOUT THE PROVINCE.

(*Vide* Map.)

The information from which these reports are deduced is received from correspondents in various places in the districts into which the Province is divided.

The Province has been divided for purposes of comparison into ten districts, the comparisons being based upon differences in geological formation and meteorological conditions due to (*a*) difference in height above the sea level, (*b*) difference in prevailing winds, (*c*) difference in rain and snow-fall, (*d*) difference in forest areas. These divisions are due to the fact that relations more or less intimate are assumed to exist between the prevalence of certain diseases and the predominance of one or more of these conditions.

The comparison of diseases in any district being dependent upon the number of cases reported by physicians as occurring in their own practice, it follows that the degree of correctness will be in proportion to the number and accuracy of reports received. It is felt, however, that the number of reporters from the various districts is large enough to make the reports sufficiently accurate for Provincial comparison.

To make these reports more complete, the meteorological condition of the various districts is also appended to the map, the Dominion Weather Service having kindly consented to supply the Board with weekly reports.

As will be seen, the average height above the sea-level of any district is deduced from the heights of the various localities of such district as are given on the map.

The names of the diseases which are given in the printed spaces are arranged in the order of prevalence, the one of which there is the greatest number of cases being placed first, the next greatest placed second, etc., etc.

Opposite each disease is placed its percentage value as compared with the total number of cases of all diseases reported from the district.

Explanations of diagrams:—In Diagram C, on the horizontal line opposite the number representing each district, will be found the various weather conditions in their respective vertical columns, as deduced from the reports supplied by the Toronto Observatory. Thus comparisons can readily be made.

In Diagram A, representing the prevalence of disease, are to be seen vertical columns with the left-hand vertical divided into ten parts, each of which is equivalent to ten per cent. This division is intended to represent the *area of prevalence* of any disease. Thus, where any one of the diseases, prevalent in any one area, is found in all the others, it will be equal to one hundred per cent., and so on for the other numbers below *ten*.

Diagram B shows the *degree of prevalence* of diseases occurring throughout the various areas of the Province. The comparison is made by taking the total number of cases of any one disease and finding the percentage of it as compared with the total number of cases of all diseases recorded for the week.

The diseases are arranged in order of prevalence, those in any given space having a percentage equal to or higher than the figure placed opposite the space in the column to the right. Thus, as will be seen in the diagram, *Bronchitis* has a percentage greater than 12¼ per cent., while *Erysipelas* has a percentage less than 2¼ per cent.

The information supplied in Diagram B of earlier Bulletins being of great importance, as supplying data concerning the localized degree of prevalence of any disease, can be readily obtained by a study of the various districts in which any particular disease occurs.

N.B.—The copy of the map accompanying this report has the various districts represented by their numbers only; while in the copies of the map issued weekly the extent of the districts is made additionally evident by the use of different colours to represent the various areas.

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APPENDIX D

WEEKLY HEALTH BULLETIN

For Week Ending SATURDAY, FEBRUARY 17th, 1883.

Issued by the Provincial Board of Health of Ontario.

WITH WEATHER REPORT SUPPLIED FROM THE METEOROLOGICAL DEPARTMENT.

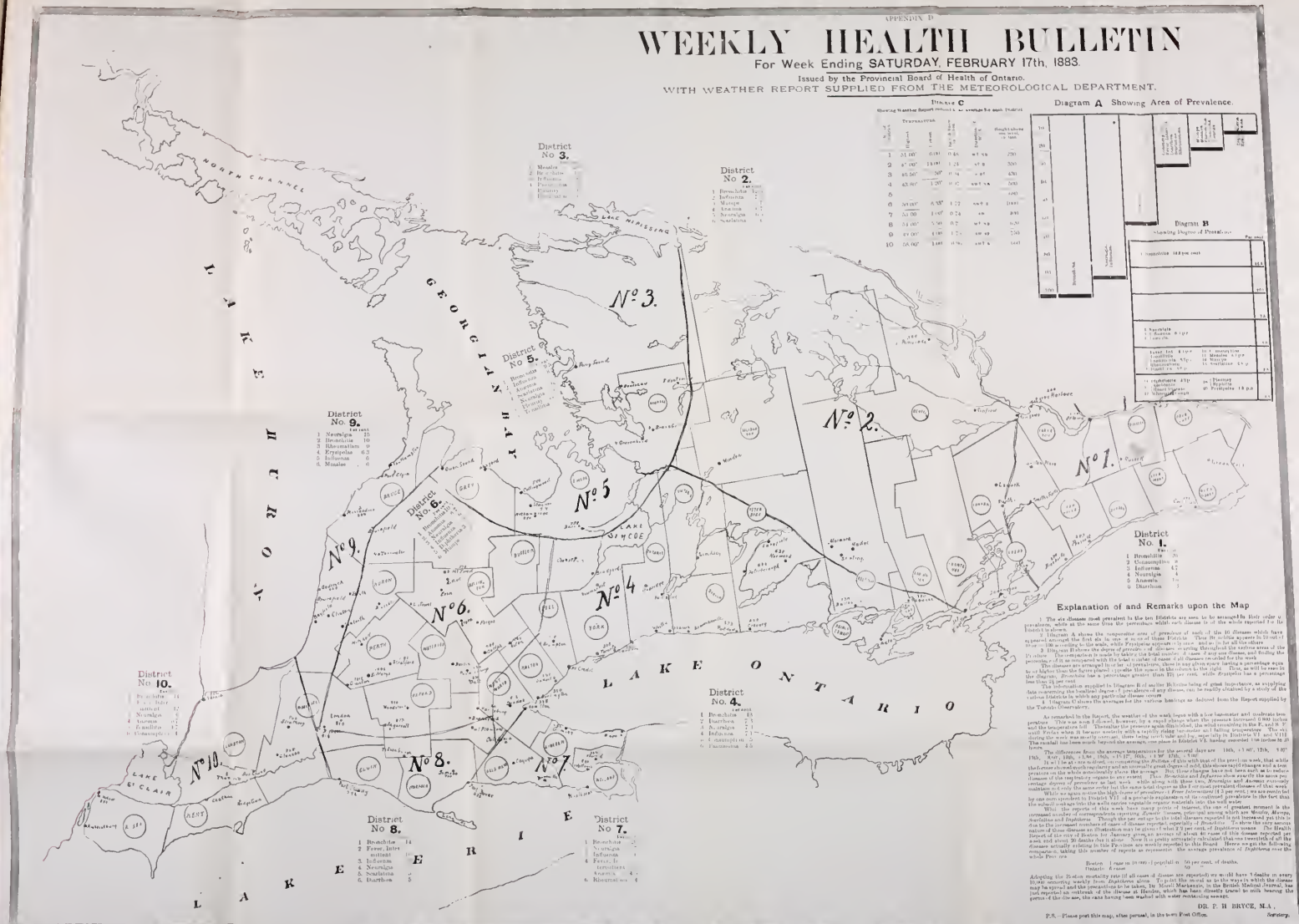

Diagram C

Showing Weather Report reduced to an average for each District

No.	Stations	Temperature		Rainfall		Height above sea level in feet
		Mean	Variation from average	Inches	Variation from average	
1	51.00°	6.91°	0.45	wet 0.8		250
2	48.00°	14.00°	1.24	wet 0		300
3	46.50°	7.0°	0.4	wet 0		670
4	43.00°	1.20°	0.6°	wet 0.8		500
5						1000
6	50.00°	6.33°	1.22	wet 0.2		1000
7	53.00	1.00°	0.74	dry		800
8	51.00°	5.50	0.7	wet 0.9		650
9	49.00°	4.00	1.2	wet 0		1200
10	58.00°	1.00	0.9	wet 0.6		1000

Diagram A Showing Area of Prevalence.

Diagram B

Showing Degree of Prevalence.

Explanation of and Remarks upon the Map

The six diseases most prevalent in the ten Districts are seen to be arranged in their order of prevalence, while all the more than the percentage which each disease is of the whole reported for the District is shown.

2 Diagram A shows the comparative area of prevalence of each of the 10 diseases which have reported amongst the first six in one or more of these Districts. Thus Bronchitis appears in 10 out of 10 reports, Influenza in 9 out of 10 reports, while Erysipelas appears in one and one only of the others.

3 Diagram B shows the degree of prevalence of diseases according throughout the various areas of the Province. The comparison is made by taking the total number of cases of any one disease, and finding the percentage of it as compared with the total number of cases of all diseases recorded for the week.

The diseases are arranged in order of prevalence, those in any given space having a percentage equal to or higher than the space itself, the space in the case of the lowest on the right hand. Thus in all districts in the diagram, *Bronchitis* has a percentage greater than 10 per cent., while *Erysipelas* has a percentage less than 0.5 per cent.

The information supplied in Diagram B of another District being of great importance, as supplying data from which the degree of prevalence of any disease, can be readily obtained by a study of the ratios in districts in which any particular disease occurs.

4 Diagram C shows the averages for the various localities as derived from the Report supplied by the Toronto Observatory.

As remarked in the Report, the weather of the week began with a low barometer and moderate temperature. This was soon followed, however, by a rapid change when the pressure increased 0.80 inches and the temperature fell 30°. Then the barometer again fluctuated, the wind remaining in the E. and S. E. quarters, attaining at times considerable velocity with a rapidly falling temperature. The weather during the week was mostly overcast, there being rain, sleet and fog, more especially in Districts VI and VIII. The rainfall has been much beyond the average, one station in District VI. having recorded 1 inch before 20 hours.

The difference from the average temperature for the several days are 14th, +1·8°, 15th, +0·8°, 16th, +1·8°, 17th, +1·8°, 18th, +1·8°, 19th, +1·8°, 20th, +1·8°.

It will be seen that with the exception of the 18th, which was the coldest day of the week, the temperature was above the average, and on the 17th, which was the warmest day of the week, the temperature was 1·8° above the average. But these changes have not been such as to reduce the disease of the week below the average as seen in the Bronchitis and Influenza show nearly the same percentage degree of prevalence as last week, while along with these two, Neuralgia and Anæmia previously mentioned, are of the same order for the week, these are also the four most prevalent diseases of that week, modified to only the same extent by the change of temperature.

While we again notice the high degree of prevalence in Fever Intermittent (3 per cent.) we are cheered by one more specimen in District VII. of a person recovering from the disease, and we believe in the fact that the school cottages into the wells carries vegetable organic material into the well water.

While the number of cases of Diphtheria is small, it is of interest, the one of greatest moment is the occurrence of two of correspondents reporting Typhoid diseases, principally among which are Mostly, Mumps, Measles and Diphtheria. Though the last only go to the total diseases reported is not increased yet this is due to the present numbers of cases of disease reported, especially of Bronchitis. To show the very serious nature of these diseases an illustration may be given of what 2·9 per cent. of Diphtheria means. The Health Report of the city of Boston for January gives an average of about 40 cases of this disease reported per week and about 20 deaths for it alone. Now it is pretty accurately calculated that one twentieth of all the diseases actually existing in the Province are weekly reported to the Board. Hence we get the following comparison, taking this number of reports as representing the average prevalence of Diphtheria over the whole Province

Boston 1 case in 10·00 (reported) = 50 per cent. of deaths.
Ontario 6 cases in 50 (reported) = 50 per cent. of deaths.

Adopting the Boston mortality rate (if all cases of disease are reported) we would have 3 deaths in every 10,000 occurring weekly from Diphtheria alone. To put the record as to the ways in which the disease may be spread and the precautions to be taken, Dr. Morell Mackenzie, in the British Medical Journal, has just reported an outbreak of the disease at Hendon, which has been directly traced to milk bearing the germs of the disease, the cans having been washed with water containing sewage.

DR. P. H. BRYCE, M.A.,
Secretary.

P.S.—Please post this map, when perused, in the town Post Office.

APPENDIX G.

Article I.

[It is not intended to correspond with Cap. VII., Part I.]

CATALOGUE OF LIBRARY BOOKS, EXCHANGES, ETC.

An Act to amend the law relating to Public Health, 7th August, 1866.
" " Public Health Act, 1848.
" vesting powers in Privy Council for protection of the Public Health.
Ann Arbor, Michigan, The Physician and Surgeon.

Blyth, A. W., Foods: Composition and Analysis.
Birmingham, Health Report of, for years 1881–'82.
Bradford, Borough of, Report, 1880.
Barkingside, Dr. Thorne's Report on Outbreaks of Scarlet Fever at Home for Girls, March 3rd, 1880.
Baltimore, Maryland, Medical Journal.
Battle Creek, Michigan, Good Health.

Chicago, Chicago Medical Review.
" The Western Medical Reporter.
" Chicago Medical Journal and Examiner.
" The National Scientific Journal.
City Board of Health Reports—
Boston City Board of Health Report for years 1881 and '82.
Baltimore " " " " 1878, '79, '80, '81.
Detroit " " " for year 1882.
New York " " " " 1882.
Portland " " "
Toledo " " " " 1881.
Washington, Report of the Marine and Hospital Service of the United States.
" Hygienic and Medical Reports by Medical Officers of the U. S. Navy.
Cheltenham Health Report.

Detroit, The Journal of Progressive Medicine.
" The Therapeutic Gazette.
" The Detroit Lancet.
" " Clinic.
Dansville, New York, The Laws of Life and Journal of Health.
" " The Lecturer.
Documents of State and City Boards of Health—
Michigan State Board of Health Documents (vide Appendices, page 58, *et seq.*)
New York " " " " " " " 33, "
" City " " " " " " " 32, "
Boston " " " " " " " 26, "
Dublin Health Report, 1882.
" Report on the State of the Public Health for April, 1882—July, September, and December, 1881.
" Report on the State of the Public Health and Sanitary Work performed during 1880.
Derby, Borough of, Annual Report, 1880.

Epidemics and Contagious Diseases, Papers concerning provisions regarding them.
Evian Ses Eaux Minerales, 1881.

Fox, C. B., Sanitary Examination of Water, Air and Food.
Fowler, R., M.D., Speech before the Metropolitan Asylums District Board.
Fever, Enteric, Reports on the Outbreaks of.

Gloucester, Health Reports, 1879, '80, '81.
Glasgow, Census, 1881—as a basis for the Statistics.
General Order, Urban Sanitary Authorities.

Hygiene des Habitations, et des Villes, 1882.
Healthy Homes, R. Sproule, M.D.
Huddersfield, Borough of, Annual Report, 1880.

Journal of the Society of Arts, 1875.

Kensington Monthly Health Reports for 1881.

Louisville, Kentucky, The Louisville Medical News.
Lewisburgh, Pennsylvania, Science and Health.
London, England, The Scientific Roll.
" City, Day Census Report of, 1881.
" " Report on some Chemical Analyses of the Water from the Surface Wells, by W. S. Saunders, M.D.
" " Report of the Commissioners of Sewers on the Results of the Electric Lighting in, 1881.
" " By-laws for Slaughter-Houses, 1877.
" " Regulations for Houses occupied by more than one family.
Locations and Administrations of Special and General Hospitals in which Contagious Diseases are Received, by Sir J. R. Cormack, M.D.
Lead Pipes, Action of Water upon, by W. S. Saunders, M.D.
Local Government Board, Annual Reports of—
Sixth, 1876–77.
Seventh, 1877–78.
Eighth, 1878–79.
Ninth, 1879–80.
Tenth, 1880–81.
Ninth, 1879–80 } Which is a Supplement.
Tenth, 1880–81 }
Les Lois Sanitaires en Serbie.

Medical Inspector's Return, in 1 Volume.
Middlesex and Hertfordshire Seventh Annual Report, 1880.
Model By-laws for the use of Sanitary Authorities, from No. 1 to 14 inclusive.
Medical Inspector's Reports on General Sanitary Conditions of certain places.

Newcastle-upon-Tyne, Report of Health Sanitary Condition of, 1880.
National Board of Health Report, 1879.
New York, The Sanitary Engineer.
" The Herald of Health.
" Druggists' Circular and Chemical Gazette.

Paris, France, Journal D'Hygiène.
Philadelphia, The Medical Bulletin.
" The College and Clinical Record.
" The Medical News.
" Medical Register.
Public Health Reports, new series, from No. 2 to 8 inclusive ; and also Volume 10, with Appendix 11.
Paddington Sanitary Report, for 1880.
Public Health, Arrangement of Clauses, 1875.
" " Reports, No. 1, 1873.
" " Act, 1875.
Police and Sanitary Regulations, Report from Select Committee on.

Port Sanitary Authorities' Regulations with respect to Medical Officers of Health—General Order.
Pauper Sickness and Death Returns, Memoranda and Tables.
Playter, Work on Hygiene.

Quatrième Congrès International d'Hygiène de Geneve, 1882.

State Board of Health Reports—
Connecticut State Board of Health Report for year 1880.
Illinois " " " " 1878.
Michigan " " " years 1873, '74, '75, '76, '78, '79, '80, '81, '82.
Michigan State Medical Society Transactions for years 1880 and '81.
Maryland State Board of Health Report for year 1882.
Massachusetts " " " years 1872, '75, '79, '80, '81, and '82.
New York, Manual for use of Local Boards of Health in State.
" State Board of Health Report for years 1881, '82.
North Carolina " " " " 1879, '80.
Rhode Island " " " for year 1879.
St. John Ambulance Wheeled Litter, Description of.
St. Matthew and Bethnal Green Vital State and Sanitary Condition Report, during the year 1879–80.
St. Mary's Parish, in the County of Surrey, Twenty-fourth Annual Report of 1880.
Salford, Tenth and Twelfth (1880) Annual Health Reports of.
Statistical Abstracts for the Decennium, 1869–'78.
St. Mary's Abbots, Kensington, Annual Report on the Health, Sanitary Conditions, etc., of, 1880.
Stockholm Contribution à la Geographie Medicale, 1881.
Sutton-in-Ashfield, Urban Sanitary District, Dr. Parsons' Report on Outbreak of Diphtheria, June, 1882.
Smallpox and Epidemics, Memorandum on the Duties of Sanitary Authorities.
Sanitary Record.

Toronto, The Canada Lancet.
" Monthly Weather Review.
" The Canadian Journal of Medical Science.

Washington, Monthly Weather Review.
" National Board of Health Bulletin, 1879, '80, '81.
" Walsh's Retrospect.
Westminster, England, The Vaccination Inquirer and Health Review.
Whitechapel, District Report on the Sanitary Condition of, 1881.
Water Analysis.

APPENDIX H.

Article I.

REPORT OF THE COMMITTEE OF THE WHOLE ON LEGISLATION.

To the Chairman and Members of the Provincial Board of Health of Ontario:

Your Committee on Legislation, having examined the various legal enactments relating to Public Health now in force in the Province of Ontario, would most respectfully recommend as follows:—

1. (1) That such legislation be enacted as shall secure the appointment by the Municipal Council of every city, town, incorporated village and township, of a Local Board of Health for such municipality; and, at the same time, shall provide that such Board of Health shall appoint a Health Officer, who shall be the executive officer of such Board, and who shall, whenever practicable, be a properly qualified medical man.

(2) That Health Officers, so appointed, shall be required to report annually, and at such other times as may be required, to the Provincial Board of Health of Ontario, regarding the prevalence of epidemics, the progress of sanitary work, and such other matters as may from time to time be deemed advisable in the interests of the public health.

(3) In the appointment of Health Officers, the same person may be appointed by the Boards of several adjoining municipalities—should it be necessary for the purpose of avoiding expense, or for other reasons.

2. That chapter 191 of the Revised Statues of Ontario, entitled "An Act Respecting Vaccination" be applicable to towns, incorporated villages and townships, as well as to cities as at present. If this were done it would, undoubtedly, lead to a more general vaccination of the population of this Province, and consequently to a much greater freedom from outbreaks of Smallpox.

Your Committee would also recommend:—

3. The adoption of such legislation as would prohibit persons suffering from, or having very recently recovered from, any dangerous or infectious disease, such as Smallpox, Diphtheria, Scarlet and Typhus fevers, Measles, and Whooping-cough, from exposing themselves in any public conveyance, without having previously notified the owner or person in charge of such conveyance, of the fact of their having at the time, or having recently had, such disease.

4. That the owner or person in charge of any such conveyance, must not, after the entry of any infected person into his conveyance, allow any other person to enter it without having sufficiently disinfected it under the direction of the Local Board of Health or Health Officer.

5. That no person shall sell, transmit, or expose bedding, clothing or any articles likely to convey any such disease, without having first taken such proper precautions as may be necessary to remove all danger of communicating any such disease to others.

6. That no person shall let or hire any house or room, in which any of the aforenamed diseases, or Typhoid fever, have recently existed, without having caused such house and premises to be disinfected to the satisfaction of the Local Health Authorities.

7. That the penalty for the violation of the last clause, be not less than five, nor more than fifty dollars.

8. That the following be added to clause twelve of the Public Health Act of 1882, viz.: "Every municipality may provide a portable or other furnace for the disinfection of clothing and other articles, as well as such disinfectants or disinfecting appliances, as it may deem necessary; and may charge persons who are able to pay the same, such fees as may be found necessary to defray the expense for the use thereof."

9. That Section ten of the Public Health Act of 1882 be repealed, and the following substituted therefor: "Whenever this Province, or any part thereof, or place therein, is

threatened with any formidable epidemic, endemic, or contagious disease, the said Board shall have and possess all the powers, rights and authorities heretofore conferred upon, or vested in, the Central Board of Health, by the said one hundred and ninetieth chapter of the Revised Statutes of Ontario; and the said first named Board shall in such case possess, and may exercise, in its own name, all or any of such powers, rights and authorities, in addition to any powers by this Act conferred; and it shall not be necessary that the said district shall be declared by proclamation of the Lieutenant-Governor in Council, to be subject to the provisions of the said Act."

10. Your Committee would also recommend the adoption of the following clause, in order to make provision for certain cases to which there seems at present no legislation applicable: "When information has been given by the Local Board of Health of any municipality, that any remediable unsanitary condition or nuisance exists within that municipality and in one or more adjacent or contiguous municipalities; and that the said Local Board desires to take effective action for the removal of such unsanitary condition or nuisance; and if, on examination by a Commission of the Provincial Board of Health, it be found that such unsanitary condition or nuisance is dangerous to the public health, it shall be incumbent upon such adjacent municipality or municipalities, to take common action with the first mentioned municipalty in removing such unsanitary condition or nuisance; and it, or they, shall bear such proportion of the expense for such removal, as may be mutually agreed upon, or determined by arbitration."

Your Committee would further recommend:—

11. That Section two of the Public Health Act of 1882 be amended as follows:

(1) "The Chairman of the Board shall be appointed by the Lieutenant-Governor in Council, and shall be paid such annual salary as may from time to time be determined. The services of the other members, except the Secretary, shall be honorary, unless when engaged in attendance upon meetings of the Board, or any of the committees thereof, when they shall be paid such per diem allowance as may from time to time be determined, together with their travelling and other necessary expenses, when so occupied."

(2) That Section seven of the said Health Act of 1882, be amended as follows:

"The Lieutenant-Governor in Council may appoint a competent and suitable person as Secretary of the Board, who shall hold office during pleasure, who shall be the chief Health Officer of the Province, and who shall be paid such annual salary as may from time to time be determined."

12. Your Committee would further recommend, that such clauses be inserted in the Municipal Act (chapter 154), or the Public Health Act (chapter 190), Revised Statutes, as shall give to Local Boards of Health the power of ordering an examination to be made, by a competent person, of the water or waters used by any of the inhabitants of their respective municipalities, when deemed necessary by such Local Board or Boards of Health, and of regulating the construction and cleansing of wells, and for closing or stopping wells, or other sources of water supply, the waters of which shall be found unfit for use.

13. Your Committee would also recommend, that the Registration Act be amended by the following clause:

"That no public carrier or other person, shall remove the dead body of any person out of any municipality, without having first obtained a certificate from the Division Registrar of said municipality, that the particulars relating to the death of such person, have been duly registered with him under the provision of said Act. This certificate shall be known as a 'Transit burial permit.'"

All of which is respectfully submitted.

Francis Rae,
Chairman.

PART III.

Article I.

ADDRESS OF THE CHAIRMAN AT THE INAUGURAL MEETING OF THE BOARD.

To the Members of the Provincial Board of Health :—

Gentlemen,—In company with others, most of us have met before to discuss subjects akin to those which are now to engage our attention, but on this occasion it must be an additional gratification to know that we are called together by direction of his Honour the Lieutenant-Governor, in accordance with a recent enactment of the Legislature of this Province. Had we lived in olden times, or rather had we retained the customs of olden times, we would mark with a red letter the day on which we are able to congratulate the people of this country that they, through their representatives, have given practical expression to the view that has long existed with many, that it is a duty which the state owes to the people, which the people owe to themselves, to protect themselves against the inroads, the onsets of disease, against "the pestilence that walketh in darkness," no less than against "the destruction that wasteth at noon-day;" against the secret emissaries of disease that are constantly lurking about our homes, no less than against the more open array of "formidable epidemic" that calls forth the proclamation of the Lieutenant-Governor in Council. They are to be congratulated on the recognition in this Act of the fact that, whilst the means adopted to repair the damages of disease in individuals may be left to themselves, it is by united and concerted action, earnestly and actively supplemented and supported by individual effort, that its onsets can be best anticipated, prevented and arrested. Their having considered it wise and beneficial to have a body of men constantly on the watch, constantly investigating the preventable causes of disease and accident, ever ready to give advice and direct local and individual efforts in that direction, is the cause of our being assembled to-day. I feel that I am expressing not only your sentiments and my own when I dwell for a short time on the importance of the step that has been taken in establishing a Provincial Board of Health, on the extent and importance of the work that lies before it, and on the grand results that may be expected—nay, that with due care and diligence must and will follow: I know that I am expressing also the thoughts of many of our fellow-countrymen, both in the medical profession and outside of it, who for years have been labouring to perfect and diffuse knowledge, and establish better principles and practice, for the prevention of disease and the promotion of health in its highest degree of perfection.

Some who are friends of ours and friends of the scheme have had gloomy forebodings as to the difficulties that lie before us, arising, they say, mainly from the parsimonious spirit of municipalities, the dislike to spend money in anything that will not at once show itself in a tangible form to the populace. If so, it must be our constant endeavour to show to the people such facts and figures as will convince them of the speedy and bountiful return they will receive for the small outlays they may have to incur in following our advice. The field before us is indeed a large one, and one in which there will be many hard spots to reclaim; but shall we, who have been labouring in it in the cold grey dawn, be discouraged now, when the sun of prosperity has begun to shine upon us in the shape of a legislative recognition of the importance of the work? Nay, rather let us set to work with redoubled energy, let us call to our aid other labourers and co-operate with them, and let us by constant application increase the number of them until these matters become of commonly recognized importance among the people.

We shall receive cheering words and friendly assistance, as indeed we have already,

from those who are working in neighbouring fields; and we in return will cheer them on and help them in their work.

It might not be out of place for me to refer to numerous instances of what has been done by persistent and systematic sanitary reforms, such as those we desire to see introduced, or systematized and maintained in this country; but as you are doubtless familiar with statistics of various cities, towns, and other communities where the death-rate has been largely reduced by such means, and with computations showing the vast amount of money saved thereby, to say nothing of the amounts of misery, suffering and sorrow that have been obviated, and the amount of increased happiness that has resulted, I will confine myself to one illustration of these truths that has lately fallen under my notice in a paper by Hon. Erastus Brooks, entitled "What the State Owes the People—Public Health is Public Wealth," read before the American Public Health Association, and published in the report of the North Carolina Board of Health. The writer of the address refers to the statement of Mr. Edwin Chadwick before the British Scientific Association, that both the sick-rate and death-rate of Great Britain had been reduced one-third by the practice of sanitary laws, that in many parts it has been reduced much lower, and that it is his belief from what has been demonstrated that with a still more perfect system it may be reduced by two-thirds of its former rate.

Now, what does this mean for Ontario? Let us take merely what has been done in the record to which I have referred, not what may be. And what has been done may be done again. It means, then a saving of more than six thousand lives annually of the people amongst whom we move, and with whom we daily associate in friendly and business intercourse. Is it or is it not worth the effort? Who would, in the face of this estimate, grumble at the pecuniary outlay, even if this did not repay itself in money, as it will a thousandfold. But some may say, "this is not Great Britain," meaning thereby that the crowding, and poverty, and ignorance there left more saving to be done. But let us not arrogate too much to ourselves. I doubt not we can, each one of us, lay our fingers upon numbers of cases, can call by name the persons, where lives have been, to use the mildest term, needlessly sacrificed by violations of laws for the prevention of sickness and death, violations on the part of others, as well as on their own. Nor have people in sparsely settled districts much to congratulate themselves upon. This might be otherwise did they not allow their advantages in point of space to be counterbalanced by want of appreciation of other hygienic laws.

But our loss is not to be measured by the mortality list alone, frightful as it is to contemplate. We must remember that for every death there are many sick who do not die, and that their idleness while sick is a heavy loss; but let us hear the evidence the Hon. Mr. Brooks has to bring forward in connection with this view of the matter:—"If to this result the money value of life is counted, the five or six thousand lives yearly saved will run into some millions of dollars. In great Britain they place this kind of value upon human existence, just as we say in the United States that the cash value of every able-bodied immigrant from the Old World is one thousand dollars. There Dr. Farr—perhaps the highest authority in the Old World—placed, in his reports as the registrar-general of the Government, the money value of each man, woman, and child in the United Kingdom at seven hundred and ninety-five dollars. The neglected preventable deaths in England and Wales during the school period, apart from infant mortality, makes a loss to the State of ninety-five million dollars. The British life insurance companies and friendly societies also give the money value of work lost by sickness. For every death there were, as proved on careful investigations by the Government, two persons always sick and disabled, thus making a loss for each death of seven hundred and thirty days in each year. This result is reached by placing the minimum of the entire population at the sum of seven hundred and ninety-five dollars here named, and to these figures are added fifty thousand lives lost annually in the school age in England and Wales which might be saved."

A similar calculation applied to Ontario will give us a saving of nine million, five hundred and forty thousand dollars, which, on the ground that what has been done can be done, will be effected if our municipalities and our people co-operate heartily and

generously in the work. And this is exclusive of all allowance for the attendance of those who care for the sick and other similar expenses, and all allowance for the greater value of labour in this country.

In order to understand how the obstacles to sanitary reform and the apathy with regard to united and systematic effort may be best removed, it may be well to look into the reasons why this apathy has so long existed. In the first place, we know that the people, as a rule, become so accustomed to what is daily and yearly occurring around them that they do not so readily appreciate this waste of life as they would if it were aggregated into some sudden appalling calamity, such as the Victoria disaster of London, or divided amongst a number of such catastrophes. And indeed all, or even a respectable minority, do not know the facts of this unnecessary loss of life.

Secondly, too much has been left to "common sense," forgetting that common sense is not good sense, and that what is everybody's business is generally nobody's business, and that when a private individual makes it his business, he is often made to feel that some think it is not.

A third cause for this sluggishness I may be allowed to illustrate by saying that he who rushes into the water and rescues the mangled form of a child who has fallen over the precipitous bank of the river, is to the world a greater hero than he would have been had he devoted ten times as much time and trouble to erecting a fence along the treacherous roadway. But let each and every of us say whether in the event of life being lost, or damage to health and happiness incurred, by our neglecting to perform duties that have been plainly pointed out to us, or which by a gross want of thought we have failed to see in time, let us, I say, consider whether the blame that attaches to us be not as great as the credit which attaches to him. Let us also consider whether the merit that attaches to our hero can in no way be approached by the more steady patient heroism of him who incurs personal risk and devotes labour and time and money with the same object, though at an earlier period, of saving life and preventing misery.

Fourthly, there is the short-sighted money obstacle I have already referred to, and indirectly combatted at sufficient length.

The means by which we are to enlist the sympathies and co-operation of our fellow-countrymen, the people at large, is one of the subjects to which I hope you will give your attention at this first meeting of the Board. We shall find many who have already been working in these matters, and I trust that we may confidently count on their joining hands with us. Amongst such will be found a large number of the members of the medical profession, who have necessarily had their attention largely directed to these subjects in connection with the causation, prevention, and restriction of disease. Outside the medical profession also are many who have devoted a large amount of study and practice to those branches of the work which do not require medical knowledge, not to speak of those who, in connection with the subjects of biology, chemistry, and other allied studies, have thrown so much light on sanitary science. Besides, there are certain principles so long and well established that they are now parts of our popular lore: for example, most people know theoretically that air that has been once breathed is not fit to be breathed over again, and that sewer gas does not improve it; some act as if they knew it, and there is nothing to prevent any person versed in generally understood pneumatic laws and of an ingenious turn of mind from putting into practice, and pointing out to others, contrivances for exchanging impure air for pure, and cold for hot or hot for cold, as the season may require. Most people know theoretically that to drink water contaminated with the albuminoid ammonia of sewage is not healthy, even though it be as clear as "the sparkling fount of Hippocrene," or a solution of arsenic. If you now invite them to consider practically whether the sandy or gravelly soil of their back yards permits an interchange between the contents of their well and cesspool, it will not need the technical knowledge of a physician to put the question or give the answer. Again, some of the avenues by which contagious diseases are spread, and the means of closing them, can be readily appreciated by those who are not practitioners of medicine. So, too, with regard to exercise and rest, sunlight, clothing, and many of the principles relating to food.

It will be obvious that by obtaining the co-operation of prominent laymen we shall

the more quickly get the people at large to appreciate the fact that this is a thing "for the people and with the people," and no mere doctors' question; the more rapid and complete and thorough will be the introduction and success of hygienic measures among them. Besides, the more people's minds become occupied in a good sensible way with preventive medicine the less harmful quackery shall we have, and the less will they suffer (as the Mayor of Greenville facetiously remarked at the recent convention at that place under the auspices of the Michigan Board of Health), "The less will they suffer from Scarlet Fever, Cramps, Winslow's Soothing Syrup, Typhoid Fever, Diarrhœa, and Holman's Liver Pad."

The Legislature, in framing the recent Act, has already enunciated the desirability of enlisting the co-operation of laymen by making a provision for their being on the Board.

We must also seek to reach the people through the heads of municipalities, aldermen, health officers, through the press (we must take care to ventilate the printing offices), that powerful lever of modern times; through those who are engaged in Christian and philanthropic work; by holding meetings amongst them and giving them an opportunity of taking part in the discussion of such topics as they understand, of becoming acquainted with the conditions and needs of various localities, and of diffusing in a practical and interesting method such information as we can by inviting various gentlemen to contribute, and by contributing ourselves.

We must bring before them prominently and strikingly, but without undue colour or exaggeration—unfortunately we do not need that—statistics as to the waste of life and happiness such as I have already referred to. Alas! from many an empty cot the "poor dumb mouths" will speak more eloquently than we can on this point, and many a sickly form will add its passive and patient eloquence too, and display it silently and painfully before those more immediately interested. To those who have as yet had no such experience, and to hard-souled corporations (should any such exist), we must display such facts as these: that in Toronto and Hamilton alone in the last two years sixty-nine people died, most of them of course unnecessarily, from one preventable disease, Scarlet Fever. Would not those who loved them while in life have alone and unaided contributed enough to pay two Health Officers, if they could thereby—as in most cases they could—have saved those so dear to them, and if, too, the corporations of those places had been so parsimonious as to allow them? But I would rather believe that such action on the part of corporations arises from want of thought and knowledge, not from want of heart.

What a host again would be the four hundred and nine, who, by our last report, died in one year from this disease in our Province.

But, gentlemen, I must not further anticipate your labours. I have thus thrown together a few thoughts upon the position and prospects of the work of this Board, without attempting to exhaust the subject. Had I made any such effort, I would have been attempting to write a book on Public Health, which it was not my intention to do. This, I hope, we shall gradually see compiled, page after page, in your deliberations and your contributions, both in theory and practice, to the advancement of the public health. And I cherish the fond anticipation that those who, in after years, may read it as imprinted upon the sanitary condition of this fair Province, will be able to say that we have left this at least a little better than we found it.

Article II.

REPORT OF THE SANITARY CONVENTION HELD IN ST. THOMAS, ON SEPTEMBER 19th AND 20th, 1882.

By the Secretary.

The idea of holding a Sanitary Convention for the dissemination of sanitary information having impressed itself favourably upon the delegates of this Board to the Greenville Convention, held under the auspices of the Michigan State Board of Health, in April last, the matter was introduced by them to the notice of the Board, and on motion it was decided, if possible, to make arrangements for one to be held at some convenient date in September. This appeared all the more easy, since a desire had been expressed by the Mayor, Dr. VanBuskirk, and several other medical men of St. Thomas, that this Board should hold such a Convention in that city. Wishing to fall in with this desire the Secretary was instructed to communicate the resolution of the Board to Dr. VanBuskirk, and secure the active coöperation of the local members of the profession and other influential citizens. Arrangements having been completed as to the time and place of holding the Convention, a number of local gentlemen undertook to read papers on sanitary subjects, and these were supplemented with papers by several members of the Provincial Board, and others. The objects aimed at, and which I am happy to say were most successfully achieved, were to have papers prepared on various important subjects, and read, after which all present at the various sessions of the Convention were invited to express their views on the subject matter of the papers. The papers, all very valuable in themselves, were made much more interesting and instructive by the discussions which followed. Practical opinions were expressed of the difficulties arising concerning many proposed remedies for existing sanitary evils, while the advantages to be gained by the adoption of improved sanitary methods received able exposition. The benefits accruing from arousing public interest by this and other means, cannot be over estimated. Not until a much more general and active interest is aroused, and a much wider dissemination of the knowledge of sanitary laws, than at present exists, is obtained, can we expect the public of various communities to agitate for local measures tending to decrease the dangers to the public health on every hand so imminent.

Arrangements having been made with the various railways for reduced fares, persons from various quarters, who were interested in such matters, found their way thither. Owing to the fact, however, of the Convention being held during the month of the various Agricultural and Arts exhibitions, a comparatively small number of persons from a distance attended; but as the purpose of such Conventions become better known, the general interest will doubtless increase.

The following gentlemen constituted the local and associate committees:

Local Committee of Arrangements.

Dr. W. C. VanBuskirk, Mayor, *Chairman*; Dr. R. Kains, *Secretary*; D. J. Hughes, Esq., County Judge; A. McLaughlin, Esq., Registrar; Rev. Prof. Austin, Alma College; Rev. M. Fraser; J. Bell, Esq., C.E.; Dr. J. H. Wilson, M.P.; Dr. J. J. Cascaden, M.P.P.

Associate Committee.

W. Oldright, M.A., M.D., Chairman Prov. Board of Health; Dr. P. H. Bryce, M.A., Secretary Prov. Board of Health; Dr. J. J. Cassidy, Member Prov. Board of Health.

The following gentlemen, amongst others, were present:—Dr. Yeomans, a member of the Board; Dr. Cascaden, M.P.P., Iona; Judge Hughes, St. Thomas; Dr. Ellis, Toronto School of Science and Public Analyst; Rev. Prof. Austin, Alma College; Dr. Kains, secretary of the local committee; Dr. Wilson, Dr. R. W. B. Smith, Mr. Coyne, Dr. McLarty, St. Thomas; Mr. Coatsworth, City Commissioner, Toronto; representatives

of the Toronto *Globe* and *Mail*, the London *Advertiser* and the local newspapers, and the members of the various committees.

By arrangement of the Local Committee the meeting was held in the Court House, and the first session in due course, began with the Mayor, Dr. W. C. VanBuskirk, in the chair.

The following is a copy of the programme, which was very thoroughly carried out, one or two papers, however, from various circumstances, being omitted :

ST. THOMAS SANITARY CONVENTION, TUESDAY AND WEDNESDAY, 19TH AND 20TH SEPTEMBER.

FIRST SESSION, Tuesday, 2.30–5.30 p.m.

1. Opening Exercises.
2. Mayor's Address of Welcome, Dr. W. C. VanBuskirk, Mayor.
3. Advantages of Sanitary Education, Dr. J. Cascaden, M.P.P., Iona.
4. Objects and Aims of Sanitary Conventions, Dr. W. Oldright, Toronto, Chairman Provincial Board of Health.

SECOND SESSION, 7.30–10 p.m.

1. Opening Exercises.
2. Adulteration of Foods, Judge Hughes, St. Thomas.
3. Impurities of Water, Dr. W. H. Ellis, M.A., School of Practical Science, Professor of Chemistry and Government Analyst.
4. The Public Schools and the Public Health, Rev. Prof. Austin, Alma College, St. Thomas.
5. Contagion, Dr. R. W. B. Smith, Sparta.

THIRD SESSION, 10–12.30 a.m.

1. Opening Exercises.
2. Prevention of Diphtheria and Scarlet Fever, Dr. R. Kains, St. Thomas.
3. Malaria, Dr. J. L. Bray, Chatham, President of the College of Physicians and Surgeons of Ontario.
4. Restriction of Smallpox, Dr. J. Coventry, Windsor.
5. Sewerage as a Sanitary Measure, Dr. W. C. Van Buskirk, St. Thomas.

FOURTH SESSION, 7.30–10 p.m.

1. Opening Exercises.
2. Reports of the various Committees.
3. Combined Warming and Ventilation of Dwellings, Dr. J. J. Cassidy, Toronto, Member of the Provincial Board of Health.
4. Ventilation of School Rooms, J. Butler, Esq., St. Thomas, Superintendent of Schools.
5. Closing Exercises.

A discussion will take place after the reading of each paper, in which all attending the Convention, and who feel interested in the subject, will, it is hoped, take part.

N.B.—Space will be set apart for the exhibition of Sanitary Apparatus, etc.

DR. P. H. BRYCE, M.A.
Secretary.

After devotional exercises had been conducted by the Rev. M. Fraser, the Mayor delivered an address, heartily welcoming those in attendance from a distance in the name of the citizens of St. Thomas, and expressed in their name, the appreciation felt in the fact of St. Thomas having been selected as the place for holding the first Sanitary Convention, under the auspices of the Provincial Board of Health. He recognized the wisdom of the Legislature in creating the Provincial Board of Health, and dwelt upon the importance of the work undertaken by it.

After the Mayor's Address of Welcome, the regular work of the Convention was pro-

ceeded with. The Secretary of the Convention, Dr. Bryce, read a letter from Dr. Bray, President of the Ontario College of Physicians and Surgeons, regretting his absence, enforced through the death of his brother at Wingham. He had also been notified that the following were unavoidably absent:—Dr. Harris, Secretary of the State Board of Health, New York; Dr. Baker, Secretary of the State Board, Michigan; Dr. White, Chief Health Officer, Detroit; Dr. Edwards, London.

Dr. Oldright then delivered the following introductory address on

"The Aims and Objects of Sanitary Conventions."

Mr. Chairman, Ladies and Gentlemen,—Having been asked by the Committee on Arrangements to make a few introductory remarks explaining the objects of this and similar Conventions, I will endeavour briefly to do so.

The "Advantages of Sanitary Education" will be fully treated in a paper to be read by my friend Dr. Cascaden, and it will be unnecessary for me to dilate or insist at length on these advantages, or to multiply illustrations of them. The importance of health is universally admitted. Although in practice it is often denied, still our literature teems with expressions indicative of the feeling that health is the greatest and most important of earthly blessings, and our every-day greetings, our "How do you do?" and "How are you?" (as has been remarked by one of our authors) express the same recognition of the paramount importance of health. This universal admission must lead to another, namely, that it is very important that we should know how to preserve our health. This, too, has been generally admitted, but unfortunately people have also too generally supposed that it only required a little common sense to keep matters right in this respect—as right as they could be kept by ordinary agencies—and that there was nothing for it but to let the human machine run along, and when by some mysterious and extraordinary cause it should get out of order, send for the doctor.

But there has been a great change of opinion in regard to these matters within the last ten or fifteen years. Scientific men have been showing in innumerable ways that in our everyday surroundings, and our management of them, there is much more "than we in our philosophy dreamed." The next step was, and is, to make the discoveries in sanitary science of practical value; and to be so it is evident that they must become the property of the people at large; that they must know of them, and to a certain extent understand them, in order to put them in operation.

One thing that has somewhat hindered the diffusion of sanitary knowledge, and the making it of practical service, has been the common idea that this was a matter for the doctors. It is quite natural that people should feel that medical men, engaged as they are in searching out and combatting the causes of diseases, should, *ceteris paribus*, be the persons most competent to advise regarding the conditions best adapted to prevent their advent. But on consideration it will be readily admitted that in working out details there are men engaged in many other branches of scientific and professional work whose thought and experience will be of great value in advancing the cause and work of sanitary science, men versed in the laws which govern the movements of air and water (in pneumatics, hydrostatics and hydraulics), in the laws of chemistry and mechanics, and in the laws which govern the actions of men: chemists, mechanics, lawyers, legislators, civil engineers, teachers in matters secular and spiritual, these and others have their special parts to perform in this great work.

I have now hinted at two great ends which will at one and the same time be served by these Sanitary Conventions. They give to the co-workers of all classes and professions opportunities of meeting and of putting together their various contributions to the subject under discussion, whilst at the same time an audience is there obtaining all this information in the most pleasant and least laborious manner, and ready to carry it away and impart it to others. Let us take for example one of the subjects on our programme for this evening. We find there a paper on the "Adulteration of Foods." Judge Hughes will doubtless tell us some things from his own observation and as the result of his literary researches which will surprise us. Then a Government analyst will have an opportunity of giving us his experience, and making us feel a little more comfortable,

showing us how we may satisfy ourselves about this or that article. Our merchants can then explain their part, or the parts of their predecessors; and our physicians can make us a little more comfortable or a little more uncomfortable, as the case may be, by telling us the effects of the adulterations and giving us other hints. We can then invoke our lawyers and fall back again on our judges and our legislators, and ask them to protect us against the wiles and machinations of sordid men. Were I to anticipate in an imaginary way the discussions which will take place on other papers, I might bring in our engineers, our builders, our teachers, our fathers and mothers; but I find I must stop.

In that sanitary education, the advantages of which are detailed in another paper already referred to, these Conventions are calculated to take a prominent part. They will teach the adult population of all classes in the way that at present seems the most practical and the most pleasant way. They afford an opportunity of asking and answering questions that cannot be so well obtained in any other manner, and also of following out what in the schools would be called object teaching. They seem, indeed, to be the complement of that education of the rising generation to which Dr. Carpenter refers in a letter we shall hear read.

A third end that will be attained in these Conventions is the opportunity it gives of obtaining a popular expression of opinion, after fully considering the arguments advanced, regarding any matter in which an expression of opinion will be necessary or helpful in obtaining legislation,—parliamentary, municipal, or otherwise,—or in supporting the action of the authorities. They are calculated to draw forth many suggestions which may prove of great practical value, and which can be fully considered and discussed either in the meetings of the Convention or after having been previously relegated to some one of the committees that may be appointed.

Another feature in them is the exhibition of apparatus and appliances that may be of value in the preservation of health and improvement of our sanitary surroundings. To examine and report upon these will be the duty of one of the committees to be formed.

Having now roughly indicated some of the aims and objects of this Convention, I know I will be speaking the desire of the Committee of Arrangements if I ask the members of the Convention, through you, our Chairman, to join freely in the discussions and to help one another by their questions and suggestions; and it will be borne in mind that all who attend the meetings of the Convention are members of it.

Judge Hughes, of St. Thomas, next delivered the following address on the

"Adulteration of Food."

Mr. Chairman, Ladies and Gentlemen,—Your invitation for me to take part in this Convention was received at the time rather as a neat compliment—flowing out of our long friendship and personal good will towards each other—than that I should regard it seriously and prepare a paper on any subject within the purview of the objects sought after. Social Science and Sanitary Reform do not belong to any one profession and may be participated in by many, because gentlemen of leisure and culture outside of what are termed the "learned professions," adopt subjects of study that with other persons are considered specialities. I am not one of those who are favoured with leisure or possessed of the necessary culture to do more than give my own crude ideas on the subject I have chosen, and prepare a brief analysis of what I have read and observed on the subject.

We find these specialities frequently treated by laymen with ability, and I only regret that the object of writing a paper on the Adulteration of Food has not fallen into better hands.

I have been pressed into the service on this occasion more because it is desirable to give the matter a commencement than because I have an aptitude to deal with it or can say anything that is new or that may be interesting to learned men now before me.

What I have set down has been compiled more with a view to prove the necessity

for measures being adopted effectually to suppress the Adulteration of Food than that I have anything original to lay before you.

That there has been legislation on this subject—connected with the manufacture of various articles of food, drink and medicine, for many years, is known to all—and the good which has been effected by it is matter of history and experience.

We take up the articles of milk, coffee, tea, bread, oatmeal, beer, wine, whiskey, butter, and we know by everyday experience that most articles which enter into daily use and consumption, are for the most part *adulterated*.

I may say in this matter, that I am a *Reformer!* I may be so in other things when brought to the test; but in the matter of adulteration of anything—against shams and quacks and pretenders—one's nature revolts. We get aroused to righteous indignation and we feel inclined to do battle in order to put down that which is not only injurious in a sanitary point of view, but which has an immoral tendency upon our community, especially upon the youth.

What could have a worse tendency upon the mind of an apprentice to the business of a grocer than for his master, after closing his shop for the night, before calling his household together for family worship, to just peep into the shop and make a few inquiries, "Charley!" "Yes, sir!" "Have you put up the shutters safely?" "Yes, sir!" "Have you bolted the back door?" "Yes, sir." "Have you fastened the cellar door?" "Yes, sir." "Have you watered the molasses?" "Yes, sir." "Have you sanded the sugar?" "Yes, sir." "Have you done the other things?" "Yes, sir." "Well, then, now come into prayers!" This religious cormorant is careful to bolt and bar against thieves outside, never caring or thinking that by his course of training he is schooling a thief inside.

The Government of this country has set apart $10,000 for the promotion of efforts to stop this plague of adulteration of food and other things, a trifling sum considering the millions that manufacturers and dishonest tradesmen make from the nefarious practice.

There are men holding prominent positions in society, and some leaders in our churches, who, in this matter, make money directly and indirectly, and would oppose active measures looking to its suppression—and who, in the matter of dishonesty and immorality, do not stand one whit behind most of those who occupy cells in the Central Prison—they make merchandise of a fraud and a deceit. What is this but obtaining money by false pretenses?

This traffic includes merchants, tradesmen and artificers. They not only practise deceit and adulteration, but they teach it to their employés; and this tolerated dishonesty, these tricks of trade, are not one whit behind the crime of the banker's clerk who forges a cheque, or the tradesman's or artificer's apprentice who robs a till, or a journeyman who steals money. He is *schooled* by his employer or master. What surprise is it that he should follow in the line of his master's dishonesty? A negro slave who robbed his master's henroost, thought it no harm to steal the chickens that were fed by the corn raised by his enforced labour. He argued that it was no harm anyway, to steal from a master who was so dishonest as to steal a human being and make him work as a slave. I argue that you have only to let a boy witness and become indoctrinated in the mysteries of adulterating food, in order to make him an accomplished rogue.

When we find milk watered and drugged, oatmeal ground up with shorts, sugar glucosed, coffee made out of clay or peas or chicory, tea poisoned, a loaf of bread made under weight, calico sized and weighted with plaster, and almost everything turned into a cheat and a fraud, we may be prepared for a large number of matriculants for the penitentiaries.

The legislation on this subject belongs to the Parliament of the Dominion as affecting trade and commerce—subjects with which the Legislatures of the Provinces cannot deal.

The only Act of the Parliament we find on the Statute Book goes for very little, and has been in my experience inoperative. I have not known in all the eight years of its existence a single prosecution for a breach of its provisions. No doubt the fear of offending and the dread of the political influence of so large a class of offenders as are engaged in this dishonest, nefarious traffic, may account for the Act remaining so long

a dead letter. There have been measures taken by some of the municipalities on this subject, more with a view of enquiring and reporting, than of putting a stop to the practice.

The Governor is authorized in every Inland Revenue Division to appoint one or more persons who possess competent medical, chemical and microscopical knowledge as analysts of food, drink and drugs purchased or offered for sale within the Division, and the Government may cause proper remuneration to be paid to these analysts.

The Officers of Inland Revenue, the Inspectors of Weights and Measures and Inspectors of Staple Commodities, *when they are required to do so* by a proper Government Regulation made in that behalf, procure and submit samples of food or drink or drugs, suspected to be adulterated, to be analyzed by the Analysts appointed under the Act, and upon receiving a certificate that such article is adulterated, must seize the articles from which the sample was taken, and every such seizure shall be a seizure under the Revenue Act and treated as such.

(Certain sections of the Dominion Statutes of 1874 were here read.)

This legislation was simply copying some of the now obsolete Acts of the Imperial Parliament, instead of taking up some of the more recent, better considered and matured and effective legislation of the present period.

I have not thought it fit to go more into detail on this measure of legislation, but there it stands, as I said before, a dead letter on the Statute Book in so far as my experience in the matter goes. Whatever force it may have in other cities, I know it has no force here.

In Great Britain—where a tradesman's character for honesty and fair dealing is of value to a respectable man; whose character for honesty is in fact part and parcel of his capital and of his stock in trade—public sentiment has a power of *insistence* on this subject which on this continent seems to be unknown.

The *Lancet* in the year 1851 published articles on adulteration and produced a Parliamentary enquiry which caused the Adulteration of Food Act of 1860 to be passed, but that Act, like our own, became effete.

In the years 1869 and 1871 fresh legislation was attempted. In 1872 another Act was passed compelling the local authorities to appoint Analysts with competent medical, chemical and microscopical skill, to examine and report upon all articles of adulteration, and to appoint Officers and Inspectors to purchase articles of food, drink and drugs, within their respective districts and take them to the analyst for examination. Other purchasers of such articles are permitted to have suspected articles analyzed, and on receiving a certificate from the Analyst that the article is adulterated the Inspector is bound to take the necessary legal proceedings for the purpose of bringing the offender to justice.

The penalties provided are heavy, and the ultimate punishment is quite exemplary, for the convicting justice may, in the case of the selling of adulterated food with a guilty knowledge, order that the offender's name be published in a newspaper or in any manner he may think fit at the expense of the offender.

Our own and the Mother Country are not the only nations which have dealt with this subject. Prussia has dealt with it as part of her criminal law, and makes the selling of adulterated or spoiled goods a misdemeanour punishable by a penalty up to fifty dollars or imprisonment for six weeks with confiscation of goods; and it is not necessary to prove a guilty knowledge in the seller.

In the Code Napoleon the same subject is dealt with.

In Holland the Dutch law is very much the same and prescribes a punishment of from six days up to two years imprisonment and a fine of from sixteen to six hundred francs. The adulteration of bread with copperas or sulphate of zinc is dealt with by imprisonment of from two to five years, and a fine of from 200 to 500 florins.

In Paris this crime is made the subject of investigation by a Council of Health and properly punished.

In the Food Journal for 1870 and 1871, we find the results published of investigations set on foot through the various British legations and consulates, by means of

circulars of the late Lord Clarendon and Earl Granville, so that much public attention has been awakened to the necessity for putting a stop to the system.

Milk, which has become so much an adjuvant of good nursing, especially of the sick as well as an article of food for both old and young, is shamefully treated so as to increase its bulk by what is technically called *Simpson*. This is made obvious by its appearance, its specific gravity, the quantity of cream which rises, or rather which does *not* rise, to its surface and by its chemical qualities.

Coffee, as far back as 1725, and perhaps earlier, was made the subject of adulteration. In that year an Act was passed by the Imperial Parliament (2 Geo. I. c. 30) which made it penal to so treat it. In 1803 again fresh and more decided measures were passed to prevent it.

Tea has been so much adulterated that those who deal in it can afford to sell it to you and pay you back a large premium from their profits in the form of a book suited for your library! You get so much *book* and so little *tea* that it would be safer for you to buy a book and do without the tea and drink warm water.

The extensively advertised Li-Quor Tea Company deal in this way, and their advertisements, like those of St. Jacobs oil, meet your eye everywhere you turn. Upon prudent minds the impression created is that so much money spent in advertising must come out of a very profitable but a very deleterious traffic. The time was when tea imported into this country was a monopoly of the East India Company, and when to bring from the United States was to risk its being seized as contraband; but the article, that was subjected to so great a roundabout in reaching the consumer and which was beset with so many difficulties in smuggling it, was generally of the best quality, for poor tea was not worth the trouble and risk and expense connected with its long journey from India; but now-a-days, tea is made in Montreal and New York and other large sea-ports and commercial centres; the adulteration is carried on on old leaves or inferior materials after they are imported, and large floors and treating and drying houses are prepared for a traffic that is not only illegal but most nefarious and injurious in a sanitary point of view. The men who engage in manipulating this kind of adulteration are obliged to keep close nets over their nostrils and mouths to prevent the inhalation of poisonous dust which arises from the chemicals used in colouring and facing the leaves used.

Much legislation has taken place in the Imperial Parliament on the subject of adulterating tea, beginning with the Act (2 George I. c. 3, down to 4 George II. c. 14, and 17 George III. c. 29 and 4 George IV. c. 14) which imposed heavy penalties. According to Mr. Philips, of the Inland Revenue Office, there were in London alone as many as eight manufactories in which exhausted leaves obtained from hotels, coffee-houses and the like were re-dried and faced with rose-pink and black-lead in imitation of genuine tea. The Chinese now, following the example of more Christian nations, prepare and sell for exportation large quantities of spurious tea to English merchants at Canton and Shanghai, and these merchants export it to foreign customers, and pass it through the Custom House with all the forms and oaths attending a legitimate trade and exportation of good tea; so that it is hard to bring those who engage in the trade under the provisions of the Act against the Adulteration of Food. The consuming of this bad tea has a manifestly deleterious effect upon our farmers and their families, for they swallow down, three times a day, or more, cup after cup of *cheap* tea, and enjoy it probably all the more because it is cheap, and besides its being cheap they had a present of a book as a reward for buying it. The book would not probably have been purchased under other circumstances. No wonder our farmers' wives become prematurely old, and instead of preserving in riper years the vivacity which properly belongs to their more matured condition of mind and body, look like revivified mummies with skins dried like parchment. The use of bad tea stands next to the destructive habit of chewing opium. They have nervous complaints, kidney diseases, which in an especial manner are engendered by the drinking of so-called Japan tea; pains in the back, neuralgia and rheumatism, all sure results of taking into the system and overloading it with the deleterious drugs which are used in the adulteration of cheap tea, and the manufacture of cheap tea.

This morbid desire for having things *cheap* in price, regardless of quality, is one of the signs of the gullibility and ignorance of the people of this country.

The Sanitary authorities of the City of London have faithfully endeavoured to suppress the importation and sale of spurious tea. In 1870 there was a large importation of it from China, it was named "Mouing Congou" from Shanghai. It consisted of the re-dried leaves of exhausted tea, much of which had become putrid before drying. In China it was called "Maloo-mixture." Maloo being the name of the street where it was prepared, and along the sides of which heaps of this trash might often be seen drying in the sun with filth all around, and dogs and pigs walking over it. In another case they found many chests of spurious "Scented Orange Pekoe siftings" in bond. This tea was shown to have had above one sixth its proper strength; that it had little or none of the active principles of tea; it had an unpleasant odour and an acrid taste. A great portion of it was not tea at all, and the rest of it was composed of exhausted tea leaves under just enough good tea to make it flavour of tea.

The adulterations practised by the Chinese are numerous. Exhausted tea is re-dried and glazed in a very deceptive manner. Millions of pounds of leaves of different plants, other than tea are gathered and mixed with it. Mineral matter, too, in the form of China clay, fine sand, and iron filings are ingeniously incorporated with the leaf before curing, so that it is said as much as from twenty to forty per cent. of impurity is thus mixed with it.

I have given more space and time to this subject of tea, 1st, because of its more general use than of any other article of consumption except bread; 2nd, because of the millions which are worse than wasted in its importation—all capital taken out of the country and lost to our material wealth; and, more than all, on account of its generating diseases which can only have an injurious effect upon the rising generation and their progeny.

Butter and Oleomargarine.—This article has become the subject of adulteration so that legislation has become necessary in order to repress its affording an easy means of deceiving the unwary. The Act of the Federal Legislature provides that every person who shall manufacture for sale or shall offer or expose for sale any article or substance in semblance of butter, but not the legitimate produce of the dairy, and not made exclusively of milk or cream, but into which the oil of fat of animals not produced from milk, enters as a component part, or into which melted butter or any oil thereof has been introduced to take the place of cream, shall distinctly and durably stamp, brand or mark upon every tub, firkin, box or package of such article or substance, the word "Oleomargarine," and in case of retail sale of such article or substance in parcels, the dealer shall in all cases deliver therewith to the purchaser a written or printed label bearing plainly, written or printed thereon the word "Oleomargarine," and for breach of this duty the seller is for such offence to incur a penalty of one hundred dollars.

Maple Sugar, Maple Syrup, Maple Honey.—These articles come to the market so adulterated with glucose that it is hard to detect the deceit; and means ought to be provided for the convenient means of detecting it. The Act of 1878 seems fully to provide for the punishment of the offender in case he is detected in selling such to the prejudice of the purchaser, but the difficulty lies in the application of the law. A farmer brings butter mixed with grease, maple sugar or maple syrup or honey mixed with glucose, and exposes them for sale in the public market. The Market Clerk is not a scientific agent and has no special knowledge which enables him to detect adulterations and less inclination to repress the sale of them. He has taken the collection of market fees into his hands and they are all his care, the municipality have let the market fees and tolls to him at a fixed considerable sum, so that his aim is to make money. It is not to be expected that he will see after the interests of purchasers or farmers. He attends to his own interests and the machinery is entirely lacking to give this wholesome statute the force and efficacy which in the interests of the public it ought to have.

Bread.—Notwithstanding all the legislation and municipal regulations passed affecting the weight and quality it is still the constant subject of adulteration. There is one effectual remedy for this, and only one I which in old times used to be resorted to—and considering how necessary it is to be pure and good for satisfying the hunger of both

the poor and the rich, the infliction for its adulteration ought to be, as of old, with many stripes. A cat-o'-nine-tails at the cart's tail should be dealt out, as in olden times, to the baker who gives short weight to the poor man, or adulterates the quality of bread. He cannot, as does the tea dealer, plead ignorance; he *knowingly cheats* his customers and poisons them; and for that he should be publicly flogged. The pillory and the *thew* were formerly awarded in cases where bread had been found adulterated or of short weight.

The Assize of bread used to be a matter of concern to our municipal authorities, but since the adulteration of food, drink and drugs and medicines has become common and general, of course the baker is let go because this peculiar kind of knavery is only one of many tricks of trade, on the principle of *tu quoque*.

Notwithstanding its prohibition, the use of alum and other spurious articles in bread under severe penalties is still continued. The chief articles of adulteration have been alum or sulphate of copper for the purpose of giving solidity to the gluten of damaged or inferior flour, or chalk or carbonate of soda to correct the acidity of the flour, or boiled rice or potatoes to enable the bread to carry more water and thus produce a larger number of loaves per sack of flour. The art of the baker is exercised to increase the gluten in the way already mentioned or by the means of a gummy mess of boiled rice, three or four pounds of which when boiled for two or three hours in as many gallons of water will make a sack of flour yield at least 100 four pound loaves. This bread is said to be "dropsical" and gets soft and sodden at the base on standing, and quickly becomes mouldy.

Beer and Ale and Compounding Spirits.—The Act to which I have previously referred as passed by the Legislature of the Dominion sanctions and regulates the compounding of spirits and adulterating liquors, and the Government of the country derives a revenue from it; for instance it sanctions the compounding and making imitations of British and foreign wines, brandy, rum, gin, Old Tom, Geneva schnapps, British or foreign whiskey and bitter liquors and cordials.

No one, except those licensed, may carry on the business of a compounder, and he is obliged to designate by a proper label or brand who is the maker, and the place where the article is made; but I find nothing which compels the manufacturer to set forth in his label that the liquors are so compounded.

As to the adulteration of beer and ale, various Acts have been passed by the Imperial Parliament guarding especially against *cocculus indicus* which imparts intoxicating rather than stimulating qualities to malt liquors; 2nd, against those which were supposed to improve the flavour and body of the liquor as grains of paradise, capsicum pods, ground ginger, molasses and salt; and 3rd, those which gave bitterings as quassia, chiretta, horehound, gentian, etc.; and in the country breweries out of London the use of tobacco was frequently resorted to as well as *cocculus indicus*, and Mr. Phillips, to whom I have frequently alluded, expressed the opinion that the cases of brutal and purposeless violence, which were often recorded of those who drank beer to excess, were referrable to the maddening influence of these ingredients.

In this country the use of lager beer has become common. Well made of simple malt and hops it is pure and good, possessing slightly exhilerating qualities, and might well take the place of whiskey with those who indulge in the use of ardent spirits and who might be won from a growing taste for strong drink; but adulterated as it often is, with drugs, it is as injurious to the system, and in a sanitary point of view is as much a nuisance as any other adulteration. We know that for purposes of preserving it against acidity, drugs are used to save hops, and when ale in which it has been used is drunk freely, a headache and great nervous prostration follow. The use of this secret drug has been carried to such length by one of the leading brewers of this Province that his bottled ale has almost gone out of use, and lager beer may be and is so drugged that when a bottle is opened it makes a loud report, effervesces like soda water and suddenly falls flat in the glass and never preserves a bead of froth on the top, and the liquor left in the bottle or bottom of the glass suddenly becomes black from contact with atmospheric air. The use of this secret drug, whatever it is, ought to ruin the brewer who employs it by his never being able to sell such trash, instead of the poor unfortunate who, ignorant of its bad qualities, suffers from the effects of its poisonous and leady properties.

Sugar is of course contaminated, like other articles of food, by adulteration. Its manufacture from starch has become an important industry. We have heard of old rags too, being employed as a raw material. It is sent into the market under the names of grape sugar, glucose corn sugar, saccharum, and British sugar. Factories have become common, and the industry is booming under the ægis of the National Policy, and its manufacturers soon become millionaires. Just in proportion as they become rich, the people become pauperized by their having to pay for, and use as sugar, that which does not sweeten as does sugar. We pay the price of the superior article for that which is a fraud and a deceit.

It was at one time chiefly used for brewing purposes, but it is largely employed now for adulterating brown sugar, for making confectionery, jams, marmalades, and fruit jellies.

The conclusion to which I would point on this subject is not merely that legislation should take place and that officers should be appointed to carry out regulations for sanitary purposes, who secure their salaries and do nothing further, because we know that in all these things a single eye is kept upon the exigencies of political party. I have myself been a Commissioner of Tavern Licenses and I know something of the true inwardness of all such efforts towards Social Reform. I know how much party ends and how little reform—*are aimed at.* We want this subject of Sanitary Reform not merely aimed at, talked about, enquired into and reported upon, but we want the evil removed by an intelligent, scientific and determined Commission, with back-bone to inquire and ascertain, and power to deal with and abolish it. Apologizing for the length of my paper which was owing to the want of time to condense it, I will now say in conclusion that I hail this movement with the heartiest welcome and the fullest desire to coöperate in the workings of the Commission to the utmost of my ability.

A discussion on the subject followed, participated in by a number. Dr. Oldright said it had been found that in watered milk cream rose more rapidly to the surface than in pure milk. Hence though a milk might show a large percentage of cream, it might be of a low specific gravity, and poor in its other constituents. On the other hand the lactometer, if used alone, might mislead; as a milk rich in cream might, for that very reason, give a low specific gravity. He supposed that the percentage of cream and the specific gravity (as indicated by the lactometer) ought to be considered together. He would like to hear on this point from Dr. Ellis, or other gentlemen present.

Dr. Ellis concurred most heartily in the manner in which Judge Hughes had characterized the individuals who practised adulteration, and believed that the authorities would have to deal with them as persons guilty of fraud. The great bulk of adulterations were not, however, deleterious, because they would spoil the sale if the article was made injurious. From a sanitary point of view adulteration of food has great importance. Milk, upon which the young and the sick depended for life, should be kept pure and undiluted. Bad as adulteration was, he felt inclined to think the practice was on the decrease in America, or at all events not increasing. It had decreased in England. The lactometer was only for taking the specific gravity of milk, and nothing else. The addition of water to normal milk lowers the specific gravity of milk. But the composition of milk is complex, and while the butter contained in milk is of lower specific gravity than water, the solids, sugar, caseine, are of higher specific gravity than water. Therefore the specific gravity of milk results from these two factors, and depends on the amount of sugar and caseine. Variations in the specific gravity of milk varied from 1,025 to 1,033 or 1,035. If milk was unusually rich in cream it would have a low specific gravity, so that judging from the lactometer test alone one would say it was watered. Watered milk would throw up cream to the surface more rapidly than pure milk. The lactometer should only be used, he thought, as a preliminary test, to be followed by analysis. With regard to teas referred to in the paper, all green teas are, he said, faced, the best as well as the inferior qualities. Facing consisted in applying Prussian blue and China clay. Copper, Dr. Ellis said in answer to a question, was not used in green teas.

Dr. Yeomans thought the moral aspect of the question presented by Judge Hughes particularly important.

Dr. Wilson, M.P., commenting on the paper read by Judge Hughes, said that if apprentices were trained to systematic chicanery and fraud, then it was a very serious matter and called for action.

Mr. Coatsworth, in reply to a question, stated the methods adopted by the food inspector of Toronto in inspections of food.

The following resolution was thereafter adopted, viz., that the Chairman appoint a committee to consider and report on desirable amendments to the Inspection of Food Act, with a view to secure the prompt inspection and analysis of suspected commodities at the instance of private consumers: Drs. Yeomans, McLarty, and Messrs. Coyne, Farley and Casey were appointed a committee.

A committee to inspect and report on sanitary apparatus, consisting of Drs. Oldright, McLarty and Luton, was likewise appointed.

The Convention adjourned.

Evening Session.

The Convention was resumed in the evening by the reading by the Secretary of the following letter from Dr. Carpenter, of London, England.

DR. CARPENTER'S LETTER.

"CLIFTON, NIAGARA FALLS, Sept. 12th, 1882.

"DEAR DR. OLDRIGHT.—I should have been very glad to avail myself of the kind invitation which you have given me on behalf of the Committee of Management of the Sanitary Convention which is about to meet at St. Thomas, if it had not been that I am under an engagement made before I left home to be in Saratoga on the very same dates.

"I shall be obliged by your assuring the promoters and members of the Convention in any way you may deem most appropriate, that I cannot wish anything better for the physical welfare of the rapidly increasing population of your important Province than that the provisions of the Act which the wisdom of the Legislature has adopted should be carried into effective operation by the concurrence of an enlightened public opinion with the efforts of those who are charged with its administration. It may be impossible so to educate an adult population as to induce them to make sacrifices (or what they deem to be such) of their vast rights and interests for the common good. But I have great confidence that, by the judicious diffusion of sanitary knowledge among the rising generation, they may be led to see that their own individual rights and interests are really identical with the rights and interests of the community of which they are members, and that thus they will become zealous co-operators in sanitary work, instead of adding to the dead-weight of indifferentism, or, still worse, becoming active opponents of sanitary reform that may directly or indirectly tax their pockets. To this end I would strongly recommend the teaching of elementary physiology to the upper classes of every Public School: and this, not by loading the memory with a mass of anatomical detail, but by practical illustrations, which they can themselves appreciate. Thus I would have every child instructed in the circulation of the blood and the double nature of its work in nutrition and oxidation, not only by demonstration of the structure and actions of the heart and lungs, but by the exhibition of the capillary circulation in the microscope, the passage of expired air through lime-water (contrasted with the nonprecipitation of the lime by pure air), and the experience of the distress induced by breathing of a bladder full of air over and over again: with the affect of air thus chargod with carbonic acid in extinguishing a candle, which is relighted by being plunged in oxygen. It is within my knowledge that the impressions thus produced are far more vivid and enduring than any that instruction, or the reading of lessons are likely to leave on the average mind. You have in Toronto so excellent a Normal School that I feel sure that this subject cannot be lost sight of, and what I want specially to urge, is the importance of making the individual experience of every scholar go along with the instruction of the teacher. The circumstances of your country are so different from those of ours, that I feel it would be presumptuous in me to offer any criticism in regard to the provisions of

your Sanitary Act. One of the greatest of our evils is the over-crowding of the lowest class of our town population in dwellings unfit for human habitation; and the condemnation of these, and their replacement by healthy edifices is one of our greatest practical difficulties, which cannot be solved until Parliament gives power to a municipality to estimate the compensation to be given, not according to what the owners of such property have actually received as rental, but according to the saleable value of the sites for the erection of blocks of working-class dwellings that shall pay a fair rental on the capital invested. At present we have large areas of ground in London and our chief provincial towns which have been cleared by the municipal authorities, but which none of our building societies take up, because those authorities can only recoup their expenditure by asking prices for the sites which the societies cannot afford to give. I mention this not as having any bearing on your present condition, but for the sake of showing what you will have to avoid when the increase of your principal towns and the overcrowding of their denser parts may come to render legislative interference necessary.

"What strikes me is the problem which, beyond all others, you should set yourselves to solve is the disposal of the *excreta*, not only in such a manner as to be innocuous, but so as to be turned to beneficial account. Thus, in Toronto, I see plainly that the closing in of your harbour by the island (or rather promontory), and the want of tidal or current movement in the waters of the lake, make it most undesirable that the sewage of the city should be any longer discharged where there is a certainity of its future accumulation, in a degree most injurious to health. From what I have gathered of the generally level character of the great lake district, I suppose that the like difficulty must be experienced in all towns whose drainage cannot be conveyed into the stream of the St. Lawrence or its tributaries. Moreover, I notice in nearly all the land I have passed over a poverty that will tend to increase if the *excreta* of its human as well as animal population are not returned to it. Knowing how careful the farmers in many districts of France are to utilize these, I think it very probable that some system exists among the *habitans* which English settlers may adopt with advantage. And I would merely suggest that your Convention should specially turn its attention to this point, if it has not already done so, since the maintenance of the fertility of the longest settled parts of your Province must ultimately depend upon the restoration, in some way or other, of what is being continually taken from the soil. At present we, in England, are digging for phosphatic nodules, and sending out fleets of ships for guano, while we are at our wits' end to dispose of our sewage.

"In some of your new towns it may be possible to carry out the system of separating the house-drainage from the surface-drainage; run the former into tanks at street crossings, whence it may be pumped up and carted off during the night to be distributed to the neighbouring land. I know that this is done with great success in a few places in England. And I think I mentioned to you the very satisfactory results of a similar system privately carried out by my friend and old pupil, Dr. J. Langdon Down, in regard to the drainage of his large establishment for idiots at Hampton Wick, near London. This contains a population of about 300 (patients and attendants), and he has garden ground to utilize the whole of it. I never saw finer crops of potatoes and other garden stuff than in his grounds, and I can personally testify that even when the sewage has been freshly distributed no unpleasant smell arose from it. It never lay on the surface. I am sure that if you wish for detailed information as to his methods, Dr. Down would gladly supply it. I trust that you may be able to secure for the Province some kind of compulsory vaccination. Perhaps the requirement of a certificate from school children would suit you best. I see that there is a severe outbreak of smallpox at a town in the States.

"With these suggestions, I conclude by again wishing most cordially all success to your Convention.

"Believe me,

"Yours faithfully,

"Wm. B. Carpenter."

After the reading of Dr. Carpenter's letter, Dr. W. H. Ellis, Public Analyst, read the following paper on

"Contamination of Drinking Water."

Mr. Chairman, Ladies and Gentlemen,—The notion that sickness may be caused by drinking bad water has long been familiar to all. But the part which drinking water may play as a carrier of the contagion of certain diseases has only of late begun to receive the attention which is due to it. This is however by far the worst danger that we have to fear in this connection, both because the diseases which are so spread are more malignant than those caused in other ways, and because a water which is otherwise unwholesome is usually also unpalatable, while a water charged with the germs of Typhus or of Cholera may be clear, sparkling and delicious.

This is a point on which it is most essential that we should all have clear ideas, and, therefore, in several ways, let us consider what is pure water and what is unwholesome water.

Absolutely pure water is never found in nature. Water has such large solvent powers that it always contains in solution more or less of the materials with which it has been brought in contact. When we wish to obtain chemically pure water in the laboratory we distil it, *i.e.*, we make it boil, and then condense the steam. For example, if you put a lump of sugar in a glass of water you know the sugar will dissolve; if now you make the water boil, the water will be converted into steam, so that if we go on long enough we can drive off all the water and get back just as much sugar as we put in; and if we collect the steam, which we can do by making it pass through a cold tube, we find that it contains no sugar at all; nor is it necessary to boil the water. A degree of heat much less than 212° will convert the water into vapour, only we must take a longer time. Now, this is just what is taking place on a vast scale in nature. The water of a river or lake is constantly dissolving small quantities of the various rocks and soils, over which it flows, or which form its bed, and these dissolved matters are continually being carried down to the sea, so that the sea really holds dissolved portions of almost all elements known in the earth. But from the surface of the sea and of all lakes and rivers water is constantly rising in the form of vapour into the air, and this vapour is being condensed in the form of rain. This condensed water or rain is free from the solid matters which are dissolved in the sea and in rivers, and constitutes the nearest approach to pure water that we find in nature. But even rain water is not absolutely pure because it dissolves a little of the various constituents of the air in falling through it and thus contains small quantities of the constituents of the air, viz., oxygen and nitrogen, and also varying quantities of carbon dioxide and ammonia, which only exist in the air in minute proportions but which are very much more soluble in water than the oxygen and nitrogen.

Rain water contains of

(a) Dissolved gas, 7 cubic inches in a gallon.
Composed of 3.2 per cent. oxygen.
" 2.5 " carbon dioxide.
(b) Solids, 2.5 grains per gallon.

When the rain falls upon the ground, part again passes off as vapour, part runs off by streams; and part sinks into the ground. The proportion sinking into the ground varies from 20 to 90 per cent., with the nature of the soil, etc. In the ground it absorbs carbonic acid, which is abundant in the air, contained in the interstices of the soil, and thereby becomes capable of dissolving relatively large quantities of carbonate of lime, etc.

The composition of spring or deep well water necessarily varies greatly. It generally contains more or less dissolved mineral matter, carbonate and sulphate of lime, and magnesia, choride of sodium, etc., but little organized matter, and is generally bright, sparkling and palatable.

River and lake water is still more variable in its composition because it is derived from such various sources. It of course consists of the drainage from the district where

the river rises and through which it flows. If this district be uncultivated and covered with forest it will contain more or less organic matter derived from decaying vegetation, often to the extent of imparting a brown tint to such a water, as in the case of the Ottawa. If the district be cultivated, it contains organic matter derived from the drainage of the fields; and if the district be thickly populated, it will contain organic matter much of which has an animal origin.

We find then that water, however derived, contains always more or less dissolved mineral matter varying from 2 to 100 grains per gallon, and more or less dissolved organic matter.

With regard to the mineral matters, when not in such excess as to make the water unpalatable, they are comparatively harmless; although many diseases have been more or less justly attributed to the use of water containing various kinds of mineral matter. It is not with these however that we have to concern ourselves at present.

As to the organic matter, we may observe that it is impossible to obtain water for drinking purposes entirely free from it. Even rain water sometimes contains as much as one third grain per gallon. Then again, it is not the quantity of organic matter that does the mischief. A glass of cider or a cup of beef-tea are loaded with organic matter, contain a thousand times as much as a water which may act as a virulent poison. It is the quality of this organic matter that is the all-important matter.

We have seen that the organic matter contained in a water may be derived from decaying vegetation, as in the case of a river draining a forest covered area, or a stream having its source in marshy land. Water of this class is usually spoken of as "peaty;" and, without hazarding any general assertion as to the wholesomeness of such waters, we may safely say that organic matter of this character, when in the minute quantity in which it is usually found in public water supplies, is without any very serious effect on the public health.

Rivers derived from or mixed with the drainage from cultivated fields occupy an intermediate place between this class and the next class. As whatever may be said of the dangers incident to their use, applies much more strongly to the next class, we may pass them over for the present.

Rivers into which public sewers are emptied are always dangerous. We all know what a sewer is, and we are all acquainted with the general character of sewage, and apart altogether from questions of public health, we should most of us shudder at the bare idea of drinking sewage even in a highly diluted form; and yet this is what a great many people are doing every day of their lives.

A river flowing through a town or a thickly populated country, is everywhere the repository of a vast quantity of filth. It is true that in large rivers this filth is largely diluted, and it is true too that in rapidly flowing and well aerated streams the organic matter is more or less quickly oxidized and burnt up, so to speak. Still a sewage-polluted river is always a more or less suspicious source for a public water supply.

But it is not rivers alone, or even chiefly, that are contaminated in this way. Wells in towns and villages are often—I might almost say always—so polluted. Towns are usually built on a more or less porous soil, and through this porous soil wells are dug; upon the surface or a little below the surface of this porous soil is daily poured, in almost every town, an amount of filth which only one who has made a study of this subject can fully realize; but of which any one who gives the most casual attention to the matter can form an idea, however below the truth it may be, which will be sufficiently startling when one reflects that it is continually soaking through the porous soil into the wells which supply drinking water to our populations.

Now, I repeat that this is a state of things which, quite apart from questions of public health, can only be tolerated because it is ignored. Even if diluted sewage is a wholesome beverage, it is one which no one would willingly and knowingly drink, and one no one should be obliged to drink, as too many of the inhabitants of our towns are forced to do, simply from the absence of any supply not so contaminated. But we can go much further than this. Sewage-polluted water is always dangerous, and sometimes it is deadly.

I am perfectly ready to admit that a water containing organic matter may be taken without affecting the health of the consumer. I go farther, and I grant that water

loaded with fæcal matter may be drunk for a considerable time without any apparent injury; but very generally it does produce injurious effects on the health of those who drink it, and under certain circumstances, which I now propose to consider, it acts as a swift and certain poison.

Twenty years ago Dr. Budd pointed out that Typhoid fever was a true eruptive fever in which the intestinal ulcerations played the part of the cutaneous eruptions of such fevers as Scarlatina and Measles. He also showed that as in Scarlatina the specific contagion of the fever resided chiefly, if not entirely, in the exuviæ of these ulcers, and he calculated that every year in England alone from 100,000 to 150,000 intestines affected with the eruption of Typhoid Fever continue each for a period varying from a week to a fortnight to discharge the exuviæ containing the specific contagion upon the ground, or in the sewers. Now, what is poured into sewers runs into rivers, and what is poured on the ground has a very good chance of getting into wells, and here we at once see looming up a danger which even when only a probability, nay, even if only a possibility, is well calculated to appal any thinking mind. But the communicability of Typhoid through the medium of drinking water is very much more than a probability —it is a thoroughly established fact.

Since one good example is often more conclusive than a host of general considerations, I shall now proceed to recite a few cases which, I think, prove beyond doubt what I have just stated, viz., that Typhoid fever may be and is communicated by drinking water.

1. *Dr. Budd.*—In the last week of October, 1856, there was a case of Typhoid fever in No. 13 Abbotsham Place, London. Close to the partition wall between No. 13 and No. 14 was a well which supplied four houses. On the first week in November, the water from this well suddenly acquired a taste and smell which left no doubt that it had been contaminated with sewage. The inmates of No. 15, one of the four houses supplied, immediately abandoned the use of the well; the other three houses continued to use it for some days longer. On the 13th, the mother of the family living in No. 14, was seized with Typhoid, in a day or two, three of her children were also attacked. Simultaneously with these four cases, there occurred two cases in No. 12 and two in No. 13. The family in No. 15, who did not drink the well continued in perfect health. The families had held no intercourse with each other, and there were no other cases in Abbotsham Place.

2. In 1847, Richmond Terrace, Clifton, contained thirty-four houses of a good class; at the end of the Terrace was a pump, from which thirteen houses drew their drinking supply. In the latter end of September it became tainted with sewage—a fact verified by the discovery of the actual leakage. Early in October Typhoid broke out at once in all the thirteen houses where the tainted water had been drunk. In none of the other houses of the Terrace was there any fever. There were two girls' schools in the Terrace: one of these used the water from the infected pump, the other did not. In the first, eleven persons out of seventeen were struck down with fever; in the second, there was not a single case.

3. In September, 1860, thirty-one sisters of the convent of the Sisters of Charity in Munich out of 120 were seized with Typhoid. An investigation brought to light the following facts:—

The convent was situated close to the hospital. In the spring of 1860 a well was dug in the hospital to a depth of twenty feet; this well was two feet from the laundry in which the clothes of patients were washed, and the water from which was drained into the porous soil surrounding the well. It was shown by microscopic and chemical examination that the well was contaminated by the water from these drains. This well was used for the hospital laundry, but between the 17th and 28th September, on account of repairs, which rendered the supply of water in the convent insufficient, the water from this well was carried by pipes into the bath-room and kitchen of the convent. It was intended for use in the kitchen, and for baths and washing, and it was recommended that water from another source should be used for drinking. But it was found that it had been used for drinking, and all the patients acknowledged having drunk this water. As soon as the use of this well was discontinued, the epidemic ceased.

4. *Dr. Sheriff.*—A house at Ratho, Scotland, had been inhabited for forty years, and had been considered salubrious. In April, 1865, it changed hands, and a number of workpeople were constantly employed there for several weeks. In July, the family took possession, and on the 23rd, Typhoid fever broke out, and nineteen persons in all, members of the family, servants and workpeople, were affected. It was found that the cesspools communicated with the well by soakage, and Dr. Sheriff, who reported the case, finding this, and finding also the water of the well as shown by chemical analysis to exhibit proofs of sewage contamination naturally concluded that the fever was caused by the infected drinking water. But he adds :—

"The question may be naturally asked, How came it to pass that the workpeople employed about the house before the family took possession were not affected?" And he answers "that they only used the water occasionally for drinking purposes and neither had their meals cooked, nor slept in the house."

He seems not to have been aware of the fact that shortly before the appearance of the first case, a groom came to the house ill with Typhoid fever, from Dundee.

The conclusion seems obvious ; for weeks the water from the polluted well was used by numbers of persons without causing any apparent ill effects. Then we have in addition to the ordinary sewage, the excreta of a Typhoid fever patient introduced into the well, and at once the outbreak follows.

5. At Solothurn, in 1865, occurred an epidemic of Typhoid. It was found that all the patients had used water from a certain aqueduct. Houses not supplied from the aqueduct escaped entirely. A barrack was supplied from the aqueduct, 100 cadets were moved in from other cantons, forty-two were attacked fourteen days after.

It was found that a brook, which passed through the court of a lunatic asylum and received its sewage, emptied into the aqueduct. In this asylum, a nurse from a Typhoid locality was taken ill of Typhoid, her clothes were washed in the wash-house of the asylum and many of them soaked in the brook itself. She was taken ill in the middle of July and died on the 8th of August. After the middle of August an epidemic appeared throughout the entire locality supplied from the aqueduct.

The celebrated epidemic of Typhoid which occurred at Lausen, in 1872, a village which had been free from the disease since the passage of the allied armies, in 1814, and which was distinctly traced to the contamination of the public water supply, by the excreta of Typhoid fever patients through the porous soil of a hill of considerable size which had once been the morraine of a glacier is too well known to need more than mentioning.

One might go on almost indefinitely multiplying similar cases, but enough has been said to show how jealously we ought to guard our water supply against the possibility of sewage contamination.

The conclusion of Dr. Ellis's paper was the occasion for loud applause.

Dr. Yeomans recited some instances arising in his own practice in support of the proposition advanced in the paper regarding Typhoid Fever.

Dr. Oldright believed it must be apparent to every one that there must be a divorce between our wells and the present system of disposing of sewage matter. He alluded to the practice of filling ravines in towns and cities with refuse and filth, on which afterwards houses were erected to the detriment of those who inhabited them. He was glad our eyes were being opened to the necessity of these sanitary reforms.

In reply to questions Dr. Ellis said water well filtered was better than undoubtedly impure water, though he should be sorry to drink filtered water. It would, he should think, improve water contaminated by sewage to boil it.

The discussion on this interesting topic became general, and Dr. Ellis was called upon to answer a number of questions.

A vote of thanks to Dr. Ellis for his paper was passed.

Dr. R. W. B. Smith, Sparta, next read the following paper on

"Contagion."

Mr. Chairman, Ladies and Gentlemen,—The selection of this topic has been made with the hope that in the discussion thereon some light may be diffused upon a subject which cannot be too well understood by the general public.

Contagion may be defined as the agent by which a disease is transmitted; and a contagious disease is one which is capable of being communicated from one animal to another, either of the same or some other species. As to the primary origin of the various contagious poisons and whether they are capable of being produced *de novo*, at the present time there is much doubt. There is a probability that a few of the contagious diseases are generated by some distinct action, but the majority of these affections are communicated from one human being to another, while others are transmitted by some other animal to man.

The contagion may exist in different forms and may be given off in as many different ways. For example, in one class of diseases it is associated with parasitic animals or plants, or their germs; while in another class the contagion is believed to be connected with organized plants or cells, such as those of tubercle or Cancer. It may also exist in the contents of vesicles or papules, or in the substance of a dried scab which follows a pustule, as in the case of Smallpox. Pus or other materials derived from some inflamed or ulcerated surface may convey the contagion, as in the case of puerperal Peritonitis, Syphilis, etc. The exhalations and exeretions of the body may contain the germs of a disease. The contagion of Whooping Cough exists in the breath alone; while in some other diseasee it seems to be present in all the exhalations as well as the various secretions of the body. The epithelium which is cast off in Scarlatina contains a great deal of the poison of that disease; while in Cholera and Typhoid Fever the fæces are believed to be alone capable of transmitting these diseases. Hydrophobia is an instance of how from contact with the saliva of the affected animal the disease may be conveyed. Thus we notice that the conditions under which the poisonous germs of disease may exist are many and varied, and that the modes by which these germs of disease are propagated are also numerous.

In considering how the contagion may be conveyed from one individual to another, we notice that a few diseases can only be transmitted by bringing the substance in which the poison is found into close and intimate relation with the minute vessels of the tissues, so that immediate absorption may take place. This is the only method by which Syphilis and Hydrophobia can be transmitted. Another method of communication is by direct contaet, as in the case of parasitic diseases. It is particularly through mucous membranes that poisons may enter in this way, as is well illustrated in the various forms of purulent Ophthalmia. Many contagious diseases are transmitted without there being any immediate contact. In such cases the poison may be given off into the atmosphere and inhaled, or it may enter the system of another person through the pores of the skin. The poison might also eome in contact with the food or milk, and thus pass into the system; or it might become attached to articles of clothing or bedclothes and by this means be propagated. Cases of this kind are common where clothing has retained the poison of some disease for a long time, and ultimately been the cause of another outbreak of the disease. Flies and other insects are believed to be a means of propagating some diseases, by alighting first on diseased and then on healthy persons. Drinking impure water is a most dangerous medium of conveying the poison of Typhoid, in consequence of the excreta through defective drainage finding their way into wells. When the poison of a disease reaches a person it attaches itself to the skin as well as the mucous membrane of the mouth, nose, throat, and respiratory passages. It then passes through the thin membranes, or becomes imbedded in the thiek mucous tissue, and thus reaches the minute capillaries and lymphatics by which it is conveyed through the system.

We now come to the brief consideration of the

Degrees of Contagiousness of the different Diseases, and their Modifying Influences.

The certainty of transmission of different contagious diseases is exceedingly variable. Some, such as Smallpox, are readily communicated; while others, such as Typhoid Fever, are not nearly so likely to be transmitted. The chances for a contagious disease being produced will vary according to the quantity and strength of the poison which reaches the system, and also the time at which the poison is communicated. Much will depend upon the state of health, previous habits, and constitution of the person to whom the contagion is applied. A previous attack of a disease generally modifies, if it does not protect a person from, a fresh attack. Climate and season have a marked effect on different diseases, some requiring a high temperature for their development, others being checked by much heat.

The Nature of Contagion.—There is much dispute among writers as to the nature of the active principle by which the ordinary infectious diseases are propagated. But it is conceded that in connection with each disease there is a specific poison, capable of originating this one and no other; and without the action of which on the system the disease cannot possibly occur. With respect to the nature of this virus there are various theories. The Germ Theory, the one most commonly entertained at the present time, teaches that every contagious disease is due to living germs specifically distinct from all others. Two distinct theories, however, exist in regard to the precise nature of these germs: (1) It is believed by the majority that they are in reality *microscopic parasites* belonging either to the vegetable or animal kingdoms, such as minute fungi, bacteria, etc.; and bodies of this nature have been described as having been observed in the contents of vesicles, secretions, excretions, etc., in Smallpox, Typhoid and other diseases. (2) Beale, Simon, and other pathologists, claim that the germs are not parasitic, but that they are extremely minute particles of living germinal matter or bioplasm, which present no difference in appearance in different diseases, even under the highest power of the microscope, but have an essential difference in *vital power.*

The Effects of the action of Contagion upon the System, and the Changes it undergoes.—As a rule the first action of the morbific principle is on the general system, and this is usually followed by local lesions. When the virus of some particular fever enters the system it is generally believed to produce some primary change in the blood; while some assert that it acts first on the nervous system. The blood certainly becomes altered in its physical and chemical characters, its fibrine being especially diminished. Many suppose that a fermentative action is set up. The germs rapidly multiply, probably at the expense of the albuminous elements in the blood, and hence the smallest particle of a contagious poison introduced into the body may generate an innumerable quantity of the same poison. The symptoms of the disease are preceded by the period of incubation, which differs in duration according to the disease; and then follows, as the result of the development of the virus in the system, the malady itself. Should the disease progress favourably, after a certain period the symptoms subside, and the poison, ceasing to increase, is finally expelled altogether out of the system.

We next notice the

Hygienic Treatment of Contagious Fevers, and the Methods Necessary to Prevent and Limit an Epidemic.

When a physician finds himself in charge of a patient suffering from an infectious fever, he has, in addition to the vigilant care of his patient, another important object to be kept in view, viz.: to prevent the transmission of the disease to others; and the measures which prevent this end should be understood by all.

1. Complete isolation should if possible be secured, and everything which might serve to convey the contagion should be destroyed. An example of the utility of this measure is seen in the success which followed the stringent sanitary measures taken to prevent the spread of Smallpox in this city recently. The patients, as soon as the symptoms of the disease were manifest, were at once isolated, and the clothing, etc.,

burned. To the timely action of the authorities in this instance is probably due the prevention of what might have been a serious epidemic. St. Thomas should congratulate itself on having had a physician in the civic chair during the past year.

2. Ventilation is essential in every sick room, and this can readily be secured by freely opening the windows, care being of course taken to protect the patient from draughts. All excessive bedclothes, carpets, and curtains should be removed, and the room, as well as the patient, should be kept as free from dirt as possible.

3. Those coming in contact with the patient should avoid inhaling his breath, and should afterwards clear out all saliva from the mouth, and thus avoid swallowing it.

4. The discharges and exhalations from the patient should be *at once* disinfected. The air of the room should be somewhat impregnated with some valuable disinfectant. The spray from a weak solution of carbolic or sulphurous acid is excellent for this purpose. Secretions from the nose or mouth should be removed by disinfected rags, and these at once burnt. The excretions should be removed in utensils containing some disinfectant. This is especially necessary in cases of Typhoid Fever and Cholera, in which it has been established that the contagion is conveyed by the discharges from the bowels. The best disinfectants for this purpose are carbolic acid and the chlorides of zinc or lime. Food should not be allowed to remain long in the room, etc.

The washing of the clothes which have been in contact with the patient is often a means of spreading the disease. To avoid this it is well to sprinkle the clothes thoroughly with a solution of permanganate of potash before taking them from the room. The room in which the patient has been confined should be thoroughly washed and carbolic acid added to the water. White-washing the room is also an excellent method of lessening the danger of the disease spreading. These measures are essential in proportion to the degree of contagiousness of the disease.

When it is first discovered that an epidemic threatens to invade a community, additional precautions are called for, and a thorough attention to proper hygienic conditions should be made compulsory. To accomplish this, competent and intelligent persons should be appointed, whose duties would be to go from house to house and enforce an obedience to sanitary laws. They should notice that the following practical points are observed:—

1. Cleanliness, including frequent cleansing and white-washing of the premises, and free ventilation.

2. Special attention must be paid to *house refuse* as well as all other decomposing organic matter, which should be promptly removed after being disinfected.

3. The sinks and drains about the house, the sewers, water-closets, and all low ground about which foul matter might accumulate, should be inspected and stringent measures taken to secure their purity. Disinfectants should be freely used during the cleansing of any premises.

4. The water supply of every household should be looked after, and care taken that no organic matter gets into the wells, which too often are near drains, or may be dug in ground where from the proximity to some stable or cesspool the earth may be saturated with organic matter. The water used for drinking should be filtered before using. The milk supply should also receive attention. The milk from cows fed on refuse from breweries has been pronounced impure.

5. When any preventive to an epidemic is known, advantage should be taken of this knowledge. For example, Vaccination should be made compulsory, and should be thoroughly enforced in the case of all who have not been previously vaccinated.

In short the duties of a Health Inspector should be to see that all measures having a tendency to check the spread of contagious and infectious diseases should be thoroughly enforced; and that all causes to which might be assigned the origin of such diseases are promptly removed.

The blind indifference to the prevention of disease, which has so largely existed in the community, is commencing to show signs of disappearing; and we may indulge in the hope that in the near future *at least* as much interest will be manifested in the *prevention* as in *the cure* of disease.

Rev. Prof. Austin, Alma College, St. Thomas, thereafter read a paper entitled,

"The Public Schools and the Public Health."

Mr. Chairman, Ladies and Gentlemen,—The work of Sanitary Science in the prevention and removal of disease is very nearly allied to the great scheme of human salvation—in fact may justly be regarded as a part of the work of the Gospel, and of the mission of Jesus Christ to earth. Men miss very much of the scope and meaning of the Christian religion who limit its operations to purely spiritual concerns, and relegate its practical benefits to the life to come. In all ages there have been multitudes of men so carried away with the superior importance of the spiritual life as to be unmindful of the claims of this fearfully and wonderfully constructed temple we call the human body. Some have even claimed to derive sanction for such views from the religion of Jesus Christ. But where, it may be asked, in the teachings of the Son of God are men taught to ignore the body or the present life? Surely not in his precepts, for He taught men that their bodies were temples of the Holy Ghost, constantly guarded by Divine Providence, and hence worthy of the best human attention. Surely in Christ's miracles He does not ignore the body or the natural life, for He heals it of every malady, and thus earns for himself the title of the Great Physician. Indeed, one distinguishing feature of Christ's teaching is its perfect adaptability to the physical relationships of life as well as to the spiritual, so that his followers have promise of the present life as well as that to come. So high is the estimate Christianity puts on the physical nature and the present life, that wherever it obtains, the various sciences that cluster around the human body rise up spontaneously into importance and dignity. Contrast, if you will, the medical science of the Indians or the Chinese with the progressive, critical, and far-reaching medical sciences of Christian lands.

The point I wish to make clear is this: Christianity is eminently practical, and its precepts should be applied to the body as well as to the soul, to the present life as well as to the future, and hence sanitary science and sanitary reform have special claims upon all Christian people, deserving not merely their endorsement and sympathy, but their active co-operation. And that there is urgent need of active and general co-operation in the great work on the part of all good citizens who can doubt? The people perish to-day as of old for lack of knowledge. Men sicken and suffer and die all around us, not because the course of nature is complete, but because they know not the laws of their own being—the very A B C of practical education. Men die, not because of old age, but because they know not how to escape the shafts of death shot at them out of impure air, or the poison of impure food or drink, and because they know not when sick how to apply the simple and effectual remedies of nature about them. Knowledge costs both time and money; ignorance costs both time and money and life itself.

Who can contemplate the constant ravages of disease in the destruction of the physical powers, the blighting of promising lives, the blasting of human hopes, and reflect that in the vast majority of cases these ravages are preventible and unnecessary, without an earnest desire to combat and destroy it. The evidence of the urgent need of this movement in the way of sanitary reform is patent to the sense of sight and the sense of smell on every hand, while the fearful destruction of life wrought by zymotic diseases is well known to all who have investigated. Now, to whom are we to look as the leaders of this sanitary reform—as the educators of the people in sanitary science? What class of society is best calculated to arrest and fix public attention upon the great evils being suffered at present, and to banish the dense ignorance on matters of health and disease that prevails so alarmingly in society? Our minds naturally turn to the physician, whose whole life is supposed to be devoted to scientific research and conflict with disease and death. He, from his very position among men, is the natural instructor of society on sanitary matters. From his knowledge and experience, from his wide range of acquaintance and influence, from his direct intercourse with the sick and suffering he derives invaluable opportunities of imparting that instruction with which the health and happiness of the people are so intimately associated. And there can be no question that society in general experiences the benefit of a great deal of private and

gratuitous instruction that aids materially in keeping down the ravages of zymotic diseases and increasing the average of public health. But while giving physicians their due credit, it may justly be doubted if they can ever be the chief, much less the sole agents, in this work of sanitary education and reform. Some of their number are as little interested in matters regarding public health as those who know less of the sufferings and needs of society. Many of the most talented are worn out with professional duties, and all of them from the very exigencies of the case have to restrict their work chiefly to the healing of the sick, and leave the work of instruction and warning of the masses to other hands. The minister of the Gospel, as the follower of Him who went about doing good to the bodies as well as to the souls of men, ought to accomplish much in the education of the public on matters of health and good living. Too often the teaching of the pulpit has been largely occupied with controverted points of theology to the neglect of practical teaching regarding the every day life. Could not many a sermon on disputed points of doctrine, alike above both preacher and people, be omitted with advantage in favour of instruction on the practical Christianity of better living. Ministers themselves are partially responsible for the idea which is altogether too prevalent that religion consists in church attendance, song, prayer, and collections. People should be taught that to live according to the laws of God written within us, to enjoy good health and promote it, to have a healthful home and preserve it such—that these are an important part of religion. Men ought to be taught by the pulpit that he who knowingly violates the laws of nature is a sinner in need of Divine pardon. They must come to understand—and I think it the business of the pulpit to cause them to understand—that the laws of nature written on their being are the laws of God, and just as binding on the heart and conscience as if written on the inspired page. I would not secularize the pulpit—I would not detract one iota from the amount of teaching on matters purely spiritual, yet I would vote heartily for the introduction of plain and pointed application of Gospel truth to the every day life of the people—even if some powerful and eloquent and ponderous and learned discourses on controversial theology had to be omitted. Yet ministers, with their multiplied labours, can be helpers only and not leaders in this work of sanitary reform. To whom then can we look as the principal agents in this work? Our answer is to the teachers of our youth. They deal with the most important class to reach. Instruction imparted by them in the Public Schools would have a whole lifetime in which to bring forth its fruits. What then, it may be asked, can the Public Schools do for the public health?

1. The Public Schools of our land ought to be utilized to the promotion of greater physical vigour among the youth of both sexes. A robust constitution easily throws off ordinary attacks of disease which cause the weak and frail to succumb. What is required first of all in the battle with disease and death is a higher type of physical manhood. This, it appears to me, is best secured by instruction and training in the schools. And for this purpose I would devote a fixed part of school hours daily. An hour of physical exercise directed by a skilful teacher who knows how to make it at once enjoyable and beneficial would only increase the zest and ability of the pupils for intellectual pursuits. Let it not be imagined for a moment that the ordinary voluntary school sports will answer this purpose of physical development. The boys who take the rough and hearty exercise at school are as a rule the ones who need it least; the weak-chested, flabby-muscled lads are the ones who lounge about with marbles and other profitless games. These are the very ones who need most the stir and excitement of more daring sports. If a lad comes to school physically weak, the course of instruction and training laid out for him should aim at giving him better muscle, purer and stronger blood, and more digestive power. Why should not a defective muscle be toned up by regular exercise as well as a defective faculty of the mind? That such regular physical training would result in a higher type of physical manhood, in a greater ability for intellectual pursuits, and in a higher average of public health we have the best evidences. Dr. Jaeger, whose recent investigations on the influence of exercise and clothing on health has created considerable stir in Germany and Switzerland, found that school children who went through a regular course of gymnastics had 40 per cent. less absences (through illness) charged against them than those who did not. In another gymnasium the difference was 18

per cent. in favour of those taking regular exercise. In a girls' school where gymnastic exercises were regularly given the absences were almost *nil*. Dr. Jaeger also found that soldiers in the third year of their service had a much higher specific weight than those in the first year. The mortality among third year soldiers was 36 per cent. less than among the second year men, and among the latter the mortality was 34 per cent. less than among the new recruits. Still more significant is the fact that the deaths of the older soldiers from Typhoid and kindred diseases were relatively fewer than among recruits and the second year men. He ascribes these results to gymnastics and drill. Exercise, he says, by draining the body of its superfluous moisture hardens the flesh, and hard flesh is sounder than soft flesh.

2. The Public Schools can do much for the public health by prescribing and imparting thorough instruction on Hygiene and the kindred branches of Physiology and Chemistry upon which it is founded. Even an elementary knowledge of these subjects would fix the attention of the pupils on the subjects of health, and the need of care and discrimination in regard to labour and rest, eating and drinking, temperance, and the preservation of vital force, which would in itself be a great point gained. Such a course of gymnastic training and instruction as I have advocated would, of course, necessitate on the part of the teacher a knowledge of the subjects taught, but not a greater knowledge than every well-informed man should have of the nature and needs of the great and complicated machine we call the human body. The great objection to both the instruction and training I advocate—if, indeed, objection there can be—will, of course, be the crowded state of our school curriculum at present and the consequent lack of time. The Public School, says the objector, is for intellectual culture alone, and not for physical, and as it is more important to cultivate memory than muscle, and there is not time for both, gymnastics and hygiene must be abandoned. Grant, if you will, that the intellectual training is the more important, it does not follow that the physical is to be omitted; unless, indeed, it can be shown that the latter is incompatible with the former. The very reverse of this is the case. It may even be questioned if as much literary culture could not be given in five hours daily when an additional hour is given to systematic physical training, as in six hours daily spent exclusively at intellectual pursuits.

But even should it be shown that something now on the school programme would have to be omitted, we do not think this should prove an insuperable objection to the introduction of the instruction and training desired. The branches of the great tree of knowledge have so multiplied in this day of scientific research that an eclectic course of study is a necessity, and the demand of the age is for the practical as distinguished from the theoretical and ornamental. Now what could be more directly and universally practical than the great laws that govern us in our physical relationships and the rules that should govern us in every day life? If, then, a selection must be made, why not take the most intensely practical subjects? For of what use, so far as this life is concerned, is culturing so highly the mind if the body is too weak to bear the strain and pressure of life's battles? Of what use garnishing the jewels till their resplendent lustre dazzles all beholders, if both casket and jewels so soon are to be thrown into the pit? Why be so anxious to increase the size and value of the cargo, if the vessel is so poorly built that the storms will surely wreck her in mid-ocean? Now we are very much mistaken if this instruction and training for which we plead is not really more practical and important in every day life than some of the subjects usually found in the curriculum of the school. Let us take for example ancient history. Outside the professional walks in life of what practical value is the amount of ancient history usually received at school? Leaving out of consideration the mixture of myth and mystery, of truth and fable, of error and exaggeration usually found on the historic page, can anyone for a moment doubt that Hygiene and Physiology would be of more practical use to nine-tenths of our pupils than this branch of study? The very many questions which ancient history presents for our study and investigation may be interesting enough to the historian and pleasant enough as a pastime, but to us in this practical age are not of as pressing importance as more recent problems. Whether Thebes had 100 gates, whether Romulus did really found Rome, whether Alexander untied or cut the Gordian

knot, whether the vision of Constantine was an illusion or a reality, may have been burning questions in the early ages, but after a lapse of a few thousand years they have lost something of their freshness and interest, and hardly arouse as much enthusiasm in St. Thomas as the burning question of the great sewer.

The great problem is how to live best in our day, and for the answer of this problem a man must have some knowledge of the wonderful mechanism of his own body. Now the study of ancient history—and we merely use this subject as an illustration—to the neglect of a knowledge of the human body, its laws and its needs, is about as wise as the study of astronomy would be to the engineer to the neglect of the science of engineering. Go to him and urge him to lay aside the science of engineering for the delightful study of the stars, and he replies, "Why, sirs, other sciences may be useful and pleasant, but to me engineering is an essential branch of knowledge. Of what use for me a knowledge of the constellations if I don't know my own work? What benefit to me if I could name every star if I run my engine off the track or explode it?" Hygiene and Physiology are as practically important to every man as engineering to the engineer. What is wanted in this sanitary reform is some system at once general and efficient for the indoctrination of the people in health matters, and this system, it appears to me, can only be carried out by the agency of the Public Schools. Instruction and training there given would reach the most important class to be reached, viz., the youth; would be at once general and efficient, and would come home to the minds and hearts of the public with the sanction of the powers that be, and an authority such as no private efforts, however well directed, could possess.

A discussion followed the reading of the paper, in which Dr. Yeomans noted with pleasure that the Education Department has now recognized the importance of hygiene and physiology.

After a vote of thanks to Dr. Austin the Convention adjourned till 10 o'clock the following morning.

Third Session.

SEPTEMBER 20TH.

The meeting was called to order at 8 p.m., by the Chairman, Dr. VanBuskirk, calling upon the Secretary to read the Minutes of the previous Session.

The Committee appointed to examine and report upon Sanitary Apparatus, thereafter brought in their report.

The following is a copy of the report :—

To the Chairman and Members of the Sanitary Convention assembled at St. Thomas:

Your Committee appointed to Examine and Report upon Sanitary Apparatus, begs leave to report as follows :—

Your Committee has Examined the Earth Closets of the Earth Closet Co., No. 13, Jarvis Street, Toronto, and of Mr. John Cameron, No. 1, Victoria Street, Toronto, and is highly pleased with them. Their great advantage is their automatic action, which seemed to be very good in both.

Your Committee would take this opportunity of strongly urging the substitution of the so-called "dry-earth system" of disposing of excreta, instead of the use of privy-pits and cesspools now so common. The baneful results of allowing the soil to become saturated with the soakage of filth are being exposed in all directions. In the paper read before the Convention yesterday, by Dr. Ellis, and the discussion which followed it, one of these evils was pointed out, namely the danger of soakage into wells and cisterns. The pollution of the air by these pits is another fruitful source of disease.

Your Committee cannot, in this report, enter into a discussion of the relative merits and practicability of the dry and water systems of removal; but sanitarians are unanimous in condemning the pit system. All will agree that it ought to be done away with, and whilst very many consider the water system more practicable in large communities, all will agree in the absolute necessity of some form of dry-earth system in isolated communities, or in those communities where there is no proper sewage system nor proper sewage outfall.

Your Committee would draw the attention of the public, through you, to the remarks of Dr. W. B. Carpenter, in the letter read before you last night, as to the desirability of returning to the soil the material which has been drawn from it; this would be one of the most convenient and least offensive methods of so doing, the dry-earth system rendering such a process inodorous and inoffensive.

In households composed of adults the pail system, with a box of earth or ashes and a shovel in one corner, will answer as well as a more elaborate closet; but where there are young children, or in hotels or other places open to strangers, the advantages of a self-acting earth closet are very apparent. In both the closets under consideration the automatic action is very good and not liable to get out of order.

Your Committee has also examined the diagram of a patent trap styled an "Air Syphon Trap," by Mr. J. Caldwell, of Edinburgh, Scotland, and staying for a time at No. 75, Richmond Street, Toronto. This apparatus is cast in one piece, and consists of a water trap with two vent openings, one on the sewer side and one on the house side of it, and also has what is claimed as a protection against frost, and another protection against the entrance of rats from the sewer. The positions of the two vents are those recommended by sanitary authorities as efficacious in safely disposing of sewer gases, provided the openings communicate with tubes leading up to the roofs of dwellings, and do not open on or near the level of the ground as shown in the diagram. Your Committee can see no advantage in the division into two of the vent-tubes on the house side of the trap. The action must be supplemented by the continuation of the soil pipe through the roof as now endorsed by sanitarians, a counter opening and through current being thereby established.

Your Committee is of opinion that the rat protection, a grating with inch spaces, between the trap and sewer, will cause stoppage of the drain by interfering with the onward passage of house cloths and other contents of drains.

We have also grave doubts as to the efficiency of the frost protector, especially in our climate.

We would recommend that the seal of the trap should be deeper than that shown in the diagram.

Your Committee is informed that it was the intention of one of the leading plumbers of Toronto to send up a variety of sanitary apparatus, but that he was prevented by sickness, a circumstance which we much regret.

All of which is respectfully submitted.

Wm. Oldright,
Wm. C. VanBuskirk,
C. McLarty.

In the discussion, which followed upon the reading of the reports, Mr. McLaughlin, registrar, thought that if municipalities secured a supply of dry earth it would go a good way toward the introduction of an excellent system. In dry-earth closets, however, he noticed that unless the earth was very dry there was a tendency in it to choke up.

Dr. Oldright remarked that sifted coal ashes were a good substitute for dry earth.

The report was received, after which Dr. Coventry read the following paper on

"The Prevention and Restriction of Controllable Diseases."

Mr. Chairman, Ladies and Gentlemen,—Without attempting to place before you information of an original character I must content myself by asking your attention for a short time to the consideration of a few well recognized principles, and with pointing out how they can be practically applied in the prevention of Controllable Diseases.

Without stopping to discuss the various theories of the origin of these affections I assume them to be propagated through the agency of germs, and they cannot make their appearance in an individual without being conveyed to him, any more than a Canada thistle or a stalk of wheat would grow without their germ having first been sown or planted. These germs are imbued with various qualities, some possessing great vitality, retaining life through a long range of temperature; some of them last much longer than others; some of them have the power to convey themselves a considerable

distance, and all of them are no doubt subject to the law of natural selection, which seems to guide them to the very spot where they can best reproduce themselves. One more factor and I will leave the theoretical part of the subject. To have a good crop of everything the ground must be cultivated. The cultivated ground for contagious diseases is one where filth abounds, where the drinking water is foul, the sewerage bad, and where the food, clothing and temperature are so mismanaged as to debilitate the individual.

The following diseases are to a very large extent preventable, and call for our first and our earnest attention; and the first case of any of them is the point at which they can be most easily controlled. Cholera, Yellow Fever, Typhus Fever, Typhoid Fever, Scarlet Fever, Smallpox, Diphtheria, Measles and Whooping-cough are the maladies which carry off by far the greatest number. We have been in the habit of allowing them a good foothold, and then giving them battle. Why not declare war against them on our shores on their first advent, and maintain an army in the shape of organized Boards of Health, in every municipality, furnished with a knowledge of the enemy's mode of attack, and armed with such weapons as will capture and route the invader? The people of Ontario may safely be congratulated on the advent of such a movement. These diseases may all be circumvented by isolation and disinfection, the success of which will largely depend on the thoroughness with which the details are carried out. Cholera is the first-mentioned malady. This affection is one of the most difficult to manage. The germs are possessed of great power of locomotion, and are intensely subtle. If not arrested at quarantine it cannot be successfully isolated at ordinary distances.

Yellow Fever is in many of its habits similar to Cholera, though in this latitude we have little to fear from it.

Typhus we rarely see, and, like the last two, with a properly executed quarantine it should never appear in our midst.

Typhoid is only contagious to a slight degree, and if the principles of isolation and disinfection are intelligently applied where it exists, but little trouble will ensue. This pre-supposes the discovery and removal of the introducing cause.

With the restriction of Scarlet Fever we have had some practical experience in Windsor during the present year. It made its appearance in November last, and by the time the Board of Health was fortified with such legislation as would enable it to grapple with the disease, it had made considerable headway. To begin with, physicians were required to report all cases within twenty-four hours after their discovery. The house was at once placarded with the name of the disease. Where such arrangement could be made, one large room was selected as the "Hospital," and carpets, window hangings and upholstered furniture removed. One member of the family after another, as they were attacked, were taken to it, and kept there till all exfoliation of the skin had taken place. No members of the family were allowed to leave the premises except those who did not come in contact with infected members. Neighbours were prevented from going and coming at will. Where the family could not attend to the sick without help, nurses were procured and printed instructions were given to guide them in the hygienic management of the patient, due deference being always paid to the medical attendants' directions. After recovery and exfoliation, strong sulphurous acid soap was used to wash with. All clothing that could not be put in boiling water was hung up in a close room, and the following disinfectant used: Sulphur, twelve ounces; Potas Nitras, two ounces; Camphor, two drams. This was placed in an old iron pot and a match applied. It burns slowly, and evolves sulphurous acid gas. No form of either animal or vegetable life will survive such a process if properly carried out. In cases of death no public funeral was permitted, and interment was urged without delay. The hearse and carriage conveying pall-bearers and friends were immmediately disinfected. During part of the epidemic the schools were closed, and after they opened no member of an infected family was admitted to school within thirty days after the medical attendant certified the family was free from disease. To the credit be it said of nearly all parties having the misfortune of being inflicted with the disease, not only did they offer no objection to the regulations of the Board of Health, but instead they lent all their energies to coöperate with the Board.

Employers of labour greatly aided our efforts by refusing to allow parties from infected houses who had no certificate to work, or come in contact with, children or young people.

The advent of Smallpox to the town in the month of April proved to be a severe trial, not only to the authority of the Board of Health, but it was also at once disagreeable, arduous and at times perplexing. The malady made its first appearance in a boarding house where the father and youngest child broke out simultaneously, neither of whom had previously been vaccinated. An effort was made to disinfect the boarders' clothing, but they fled with their trunks before they could be got at, leaving only the family in the house. An attempt to remove them to the pest house was resisted, and violence threatened. Owing to a misapprehension of the powers vested in the Police Magistrate the attempt to remove the patients was abandoned, and only those not infected were sent to the pest house, a building which had not been used for three years. No new cases developed till twelve days from the death of the keeper of the boarding house, but as the case was a confluent one and situated in a populous district, infection was carried by the prevailing winds to half a dozen families, all living in a direct line, but in different streets, having no direct communication either with one another or the infected house. Nearly all the new cases were promptly removed, either to the pest house or to other isolated buildings vacated for the purpose. Only two families defied all efforts of the Board to remove them. In one the patient recovered, and after a death took place in the other, they were not only willing, but anxious to be removed. Twelve days again after this death marked another outbreak, but all were now promptly removed 500 feet from other habitations, and the disease came as suddenly to a close as did the war in Egypt.

Similar precautions were adopted as in the case of Scarlet Fever; all members of the family re-vaccinated, and all who had been in contact with them, and a close watch kept up for the next fifteen days. Thorough disinfection was practised under the direction and with the help of a trained assistant. The schools were again closed and public vaccinators appointed to vaccinate all children applying, and none were admitted to school without a certificate. None but cities have the power to pass compulsory vaccination laws. This power under the approval of the Provincial Board will undoubtedly be extended to all municipalities. Isolation, vaccination and disinfection are the remedies for this disease. In proportion to the completeness of the application of these safeguards will it be speedily arrested. Would to God we possessed the knowledge of circumventing other diseases so easily.

Diphtheria we also placarded, isolated and disinfected, the same as Scarlet Fever. The other diseases mentioned, when the public are thoroughly aroused to the necessity of stamping them out, will be dealt with in a similar manner.

By way of summary then let me say that Cholera and Yellow Fever are only successfully isolated and controlled at quarantine, or at such a distance as is not yet fully determined, but perhaps at least 2,000 feet will be found necessary. Typhus, or ship fever, should also be arrested at quarantine. Not that it is contagious at great distances, but its existence on a vessel should call for thorough disinfection.

Typhoid, Scarlet Fever and Diphtheria may with great vigilance be restricted to the point where they first make their appearance, just as a fire may be confined to the house it breaks out in, if the Fire Brigade does its duty. Isolation and disinfection are the forces at our command, but we must use them without omitting the most minute precaution. Smallpox if discovered early need not spread beyond the first case, but in order to confine it to this limit the patient, provided with a competent nurse, should be removed 500 feet from the nearest habitation. The same process of disinfection is all that could be desired. Vaccination and re-vaccination with Cow-pox will complete the process of repression. Measles, Whooping-cough, Mumps, Chicken-pox and many other diseases will yield to the same precaution.

The public mind should not be lulled to repose by trusting to such disinfectants as chloride of lime, impregnation of the atmosphere by carbolic acid, assafœtida, the camphor bag or an amulet, but should be taught that disease germs are almost indestructible and that only the fumes of sulphurous acid or chlorine gas will accomplish their destruction. Medical men must in this matter be the educators of the public, and the true physician will allow no opportunity to pass without instructing the head of every house-

hold, intrusted with the lives of little folk, how he shall best guard his door against the "grim monster."

The whole community is startled by the news of a railroad accident, or a murder, or when a few lives are lost, but a lethargy is upon them which keeps their hands folded when an epidemic is deliberately propagated among themselves, by themselves, when dozens of happy households are quickly transformed into dreary habitations.

In order to cope successfully with contagious diseases, much has yet to be done. The public must be thoroughly aroused to a sense of its duty. The matter must be urged on everyone, and information must be systematically diffused. The seeming hardships in the discipline to which people are subjected must be argued and explained, but the life-saving work must be carried on at all hazards. Legislative enactments have to be placed upon the statute book that will bring the whole community under the same uniform legislation. For one municipality to placard infectious diseases while another conceals them, is obviously unfair to the mercantile interests of the former, and from a sanitary point of view, but little can be effected without combined action.

A quarantine on the Atlantic and other borders of the country, having a real and not a paper existence, must be established and maintained.

Parenthetically allow me to remark that Smallpox was brought to Windsor by an English emigrant, a passenger on the steamer *Peruvian*, which had Smallpox on board when she arrived in Halifax on February last. The vessel was detained at quarantine, but when night came the captain weighed anchor, came alongside the wharf, paid his fine of $500, and discharged his passengers and cargo, scattering the scourge throughout the Dominion and many States of the Union.

It would seem a sensible thing to do to replace the fairy tales, the allegories, the algebra, and much of the classics taught in our schools with books containing the principles and laws of health. It would give a bent to the mind of the rising generation which might stimulate research in a field of thought, which, even though it has been tilled by able men, able physicians, is still barren to what it might be, if one of the chief studies of mankind was to attain to physical as well as moral excellence; to know what is the best to breathe, and how to breathe it; what is best to eat, and how to eat it; how to be clothed and housed; how to seek health and to shun disease; how to conform to Nature's laws relating to man's existence; how to live to a good old age and to pass away from natural decay, having suffered only a minimum of pain.

The great aim and purpose of nearly all legislation has been to enrich the country, and large sums are anually put in the estimates for the purpose, but let us hope that the time will soon come when a Minister with a portfolio of Public Health will take rank among the other members of the General Government, and such appropriations made as will place it within the range of possibilities to secure the services of the most intelligent men in the land, through whose efforts contagious diseases and the mortality caused by them may be reduced to a mere fraction.

It is due to you gentlemen, and only justice to myself, to apologize for this somewhat incoherent paper. I have written it hurriedly and have not had time to revise it. It will serve the purpose of an introduction to the discussion of the subject. I will be happy to describe details and fully explain matters that are only vaguely referred to.

Dr. Coventry's concise and practical paper was greeted with loud applause. In the discussion which followed, Dr. Oldright, commenting on the paper, remarked that anyone who would conceal contagious disease in his house, thus running the danger of spreading it throughout the municipality, for the purpose of making money, should be scouted by the community. The desirability of placarding infected houses and using necessary means for preventing the spread of contagious diseases, was, he thought, very apparent.

In answer to a question, Dr. Oldright said the duties of the Provincial Board were merely advisory. Before sitting down he bore testimony to the efficient and laborious work performed by Dr. Coventry and his *confrères* when smallpox broke out in the town of Windsor last spring.

Mr. McDougall strongly endorsed the methods used at Windsor, to prevent the

spread of Scarlet Fever and Smallpox, as commending themselves to the common sense of all. He further moved the following resolution, which was carried:—"This Convention has heard with much gratification Dr. Coventry's account of the success which has attended the adoption, in the town of Windsor, of measures for arresting the spread of Scarlet Fever, Diphtheria, and other contagious diseases, and would urge upon other municipalities the adoption of similar measures, such as prompt isolation in their own houses, or in hospitals, of all cases of these diseases which at present make such havoc among our people."

Dr. Bryce referred especially to Diphtheria and Scarlet Fever. These, he remarked, were not apparently so dangerous to life as Smallpox, but in reality they created much more havoc. Measles also caused much mortality, as but little attention was too often paid to the disease. In many of these affections it is difficult to know their true nature for twenty-four hours or more, which time is sufficient for communicating the contagion to others. Hence, in doubtful cases parents should at once apply to their family physician to have the nature of the disease diagnosed. This was most desirous inasmuch as the danger from these diseases is due to their not appearing at first so alarming as Smallpox.

Dr. Coventry remarked, to show how little Smallpox was to be dreaded, that in Windsor out of forty cases ten had not been vaccinated and out of these eight died. Thirty were vaccinated, of whom none died.

A cordial vote of thanks was tendered to Dr. Coventry for his paper.

Dr. VanBuskirk, Mayor of St. Thomas, then addressed the Convention on the subject of

"Sewerage as a Sanitary Measure." *

"There are," he said, "three modes of disposing of sewage: First, the old method —the cesspool that receives all the filth from the house, and gives rise to noisome effluvia, thus poisoning the atmosphere, while owing to the imperfect condition of the walls the excreta pass through the porous and stratified earth into neighbouring wells, the transmission being made rapidly in consequence of gravitation, the cesspools being frequently filled and the wells pumped out. Under the microscope water containing sewage discloses the presence of *bacteria* and *infusoria*, the frequent cause of bowel complaint, Typhoid and kindred diseases. The second method of disposing of sewage, that of dry-earth closets, is best for suburban parts of cities, but not adapted to thickly-populated districts. They must accept the water-closet as the best of all systems. The small sewer pipe drain laid on each side of the street for house sewage, he did not consider had any advantage over the common sewer of brick and tile. Ventilating tubes fixed to the soil pipes outside would freely ventilate the sewer."

Dr. Coventry said that if a sewer were constructed in the shape of an egg then it could be kept perfectly clean. Proper levels and a sufficient fall to carry off impurities should be carefully attended to, and the want of this he believed to be the bane of the system in Toronto. Earth closets, if property attended to, were good, he thought, but they were more often neglected.

Dr. Oldright advocated the carrying of sewer gas above the roofs of houses by pipes run up from the house drains, instead of allowing it to force its way into houses or escape on the surface of the street.

Dr. VanBuskirk rather took an opposite view, and thought the gas could best escape through the gratings in the centre of the street.

Dr. Oldright said that sewer gases, and even carbonic acid, would rise if of much higher temperature than the outside air. If too heavy to rise, let them remain in the sewers—they could do no harm there; but if they rose, or from various causes were forced, out of the sewers, it would be better for them to be discharged at a safe point overhead, rather than at the feet of persons in the streets, to be by them inhaled.

Some discussion arose as to the local system of sewerage, St. Thomas being at present agitated by the question of the best means of getting rid of sewage, after which the subject dropped.

* The Secretary has unfortunately been unable to get the full text of the paper.

Dr. J. J. Cassidy, of Toronto, next read a paper on

"The Heating and Ventilation of Buildings."

Mr. Chairman, Ladies and Gentlemen,—Last spring I had the pleasure of listening to a lecture by Oscar Wilde on the external and internal ornamentation of houses. The lecture was entitled "The House Beautiful," and the lecturer concerned himself principally with the beauty of form and colour. It is true that, as Keats says or sings, "a thing of beauty is a joy forever," and well-coloured walls, beautifully-tinted glass, the charm of carved wood, the elegant mantel with its precious freight of ornamented tiles or plaques, are not only beautiful in themselves, but excite corresponding ideas in the mind of the beholder. Much said by the lecturer has point in reference to Ontario, and a rich crop of architectural improvements may be reasonably expected from the æsthetic seed sown last spring. It shall be my endeavour in the course of this paper to add to the picture of "The House Beautiful," to give it, not the warmth of colour, but the real glow of heat, and to show how that heated air may be so managed as to warm and yet not injure those who breathe it.

During the summer months ventilation is obligatory, and is efficiently carried out. We then have cheapness, efficient heating, and satisfactory ventilation. During winter we cannot have these three things together. We can have any two of them together, as for instance cheapness and efficient heating, cheapness and efficient ventilation; but if we wish to provide simultaneously efficient heating and ventilation for "The House Beautiful," then we must cast aside cheapness and burn fuel freely. Dr. Billings, United States army, says, "The object of perfect ventilation being an arrangement by which no man shall breathe any air that has immediately before been inside his lungs or those of his neighbour, it follows that the air must move either directly up or down. Horizontal currents then cannot be used to secure perfect ventilation. Wherever they are used you secure only a mixing process, or ventilation by dilution. In the hall of the House of Representatives, at Washington, an attempt has been made to secure perfect ventilation. The air is introduced all over the floor, and passes straight up and out at the ceiling. In order to secure the proper proportions, it requires about one cubic foot of air per second to each person. That only gives a rising current of about half an inch per second. If the air had to be drawn downwards, we should have to use a great deal more; because we should have to overcome the natural tendency of the heated air to rise, for every person on the floor is a little stove, warming the air around him; and with a delicate air meter you can detect at a temperature of 50° a current of air over his head. We should also have difficulties with the gas jets, because we should be drawing the heated and impure air from them downwards." A suitable system of ventilation for churches and public halls must therefore be necessarily an expensive one. And yet by the adoption of certain methods intelligently applied, much may be done to secure the boon of pure warm air in your houses at a small cost.

It is supposed, in the first place, that the house and its surroundings are perfectly clean. Pure air is often spoiled ere it reaches our lungs by the emanations from foul stables, dirty yards, etc. In the second place it is necessary that every room in the house should be furnished with a fireplace, grate, or an open flue communicating with a heated chimney. These flues should be made to open at the base-line of the room, and communicate directly with the open air. Occasionally ventilators are placed at the ceilings of rooms; but this is an expensive method, as the heated air which may be quite pure on entering the room, ascends to the ceiling and escapes readily, obliging the occupants to burn a very large quantity of fuel, if they wish to keep the room at a comfortable temperature.

When hot water or steam is used in heating a house, the ventilating flues should be heated by a few coils of pipe in connection with the general heating system. Even in summer, when a number of persons occupy a room simultaneously, or when a case of sickness is being treated therein, the ventilation may be much improved by keeping a gas-jet or a coal-oil lamp burning under the grate or ventilating flue.

In the third place, a sufficient supply of pure warm air must be distributed to the various living rooms, and this may be accomplished in a variety of ways, according to the different methods of heating adopted.

In the Report of the State Board of Health for Michigan for 1880, I find a short paper on a mode of ventilating a room heated by a coal stove, which is worthy of being more generally known and adopted. The paper is from the pen of the Rev. D. C. Jacokes, a gentleman who has devoted much time and study to the subject of ventilation, combined with heating. The diagram, which I now exhibit, will illustrate the writer's idea.

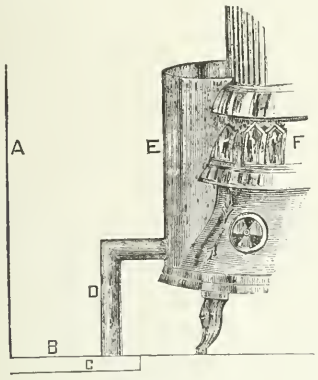

Fig. 1.

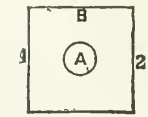

Fig. 2.

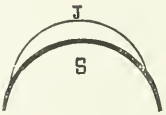

Fig. 3.

Fig. 1.—*A*, wall of room; *B*, floor; *C*, box to convey outdoor air against the stove; *D*, stove-pipe six inches diameter, fastened to jacket *E*; *E*, sheet iron jacket 16 inches wide, 18 or 20 inches high, between which and the stove the air is heated, and passes into the room; *F*, *F*, stove.

Fig. 2 shows the jacket of sheet iron, with the pipe fastened to it at *A*. The sides *1* and *2* are bent rounding so as to closely fit the side of the stove.

Fig. 3.—*J*, jacket; *S*, stove.

The ventilation is obtained by a four-inch stove pipe, opened at the bottom, taking the air from the floor and connected with the chimney. By means of this pipe the heated chimney carries the foul air from the room out of doors. Dr. Baker, of Lansing, who uses this method of ventilation in his house, considers it both cheap and satisfactory. I take all the more pleasure in bringing it to your notice, because it must be quite clear that the majority of the people of this country must always continue to heat their houses by stoves. On the score of beauty, it might be desirable to adopt some other system, for even the least æsthetic must admit that a stove is not "a thing of beauty;" but in this cold climate a grate fire, though pretty to look at and an excellent ventilator, is a poor heater, requires a good deal of attendance, and at best is only suited for small rooms.

When heating by hot-air is adopted, whether by stove or furnace, it is of course necessary to see that the inlet and delivery pipes are kept clean. In order to prevent the entry of dust and irritating particles into the rooms, it would be well to have a fine wire screen over the outer and inner orifices of the inlet pipe.

In large buildings, public or private, where heating by steam or hot-water is adopted, the same principle of efficient supply and exhaust must be rigidly observed. As an instance of how the heating and ventilation of public buildings may be changed, so as to render the process more economical and more efficient, I shall quote from the Report of the Committee on Ventilation of the Detroit House of Correction. "The old method of heating consisted in distributing along the lateral walls of the corridors coils of one and a-quarter inch steam pipes, furnishing fresh air beneath these by a number of small circular openings distributed equidistant beneath these coils, and just

above the surface of the outside earth, with exhaust of foul air through round latticed openings in the ceilings, and a vacant space beneath the roof with little provision for escape therefrom, and that mainly through imperfect joints between the roof and the walls. Of course the only method of warming then in vogue was 'direct radiation.' The present Superintendent has extended ventilating shafts from behind the several cells to and through the roof in some instances, and in others utilized old neglected flues or shafts, by placing within them gas-jets to rarify the contained air, and thus induce an inflow below and a continuous exhaustion. This supplies the needed exhaustion, while beneath and in front of a large window on either side of said corridor are placed boxes, made to fit the windows closely, containing an abundant steam coil, and so arranged that on opening the lower sash of the window, the fresh air is permitted to flow down behind an intervening screen and beneath this steam coil, and thence up through said coil to be discharged by a well regulated opening at the top. This is the 'indirect system of radiation,' by which a goodly supply of not only fresh but warmed air is supplied, fully under the control of the person in charge. This, to your Committee seems eminently practical and economical as well. The conditions of supply and exhaust have both received their proper attention, which conditions, either the one of the other, in our judgment are too often overlooked."

As a corroboration of the finding of this committee, I may remark that during the winter months, in the Toronto General Hospital, in the older portion of the building, the inlet of pure air is obtained by a somewhat similar device. The lower sash of a window in the ward is raised, thus alllowing pure air to flow in over a steam radiator. Thus even in the coldest days, pure warmed air may be allowed to flow into wards even where cases of acute lung disease are being treated. The method pursued at the Detroit House of Correction seems less likely to cause draughts. In Toronto General Hospital, the exhaust is obtained by utilizing old flues and fireplaces; in some instances a lamp being kept burning under a stove pipe elbow, which is inserted into a chimney flue. It must be confessed, however, that a more efficient system of exhaust would be to provide four flues, each containing a coil of steam pipe for each ward. These flues could for convenience be grouped in a central column, passing from flat to flat and terminating in screened outlets at the roof.

The ventilation of the more modern portions of Toronto General Hospital is furnished by the Reynolds system, which gives general satisfaction in its practical working, and reposes moreover on a sound scientific basis. The exhaust is obtained by a central shaft passing from the basement through the roof and terminating in an ornamental chimney top. This shaft contains a central iron tube, used as a flue for the furnace in the basement which heats the baths. The heat from this constant current of hot air and smoke passing through the iron tube intensifies the upward draught in the shaft. Each and every room is connected with this shaft by ventilating tubes, opening at the base line of the room. In winter, with the doors and windows closed, pure warm air is introduced after the following manner: The outside air, conducted by a large tube, passes over a dome in the basement heated by a furnace, whence it is distributed to the various rooms by tubes opening in the walls, about three or four feet from the ceiling. The supply of pure warm air is abundant; but lest the air should at any time become too hot, pure cold air can be admitted to any room by opening a tube in connection with the outer air, thus reducing the temperature of the room without creating unnecessary draught. This system is really an admirable one. The exhaust is constant and complete both in winter and summer, and the supply of pure air is completely under the control of the person in charge. When necessary the hot air supply can be cut off from any particular room in the building, the windows opened, and the most thorough ventilation practised. Having been connected with Toronto General Hospital for thirteen years, both under the old system of ventilation and the new, I can speak with confidence of the great improvement in the atmosphere of the older building. Formerly, more particularly in the surgical wards, the odours used to be quite overpowering, and it was difficult to imagine that patients who breathed such an atmosphere day after day could derive any substantial benefit from the best directed treatment. Now, on the contrary, it is pleasing to be able to state that visitors fresh from the outside air discover no disagreeable odours in passing through the wards.

Whichever method be adopted it must be clearly understood that all soil pipes, closets, lavatories, drains, etc., should be provided with independent ventilation by pipes extending beyond the roof. I have introduced the words "independent ventilation," because I consider it safer that foul pipes and drains should be ventilated directly into the open air, rather than into house flues or chimneys. In damp weather, if the flue is not heated, at night when it grows cold, or accidentally owing to choking of the flue, a downward current may proceed from it, introducing poisonous gases into our dwellings. Wherever artificial warming and ventilation, such as I have been describing, are in use it is necessary that the conditions upon which pure warm air is supplied and foul air removed should be clearly understood. It sometimes happens that a system of ventilation which is excellent in itself is condemned because through carelessness or inattention some important factor in the problem is misunderstood or overlooked. I shall illustrate these remarks by an experiment which I witnessed in the office of the State Board of Health in the Capitol at Lansing. The room was heated by hot air up to 68° F., entering by a register on one side of the room, the door and window being closed, the exhaust of foul air was supplied by a flue on the opposite side of the room opening at the base. This exhaust worked satisfactorily, as the flame from a piece of lighted paper mounted with the current. On opening the fanlight over the door, the current in the exhaust was reversed, and the foul air re-entered the room. The explanation I offer of this fact is as follows: as long as the warm air, which entered the room, found no other exit than the ventilating flue it naturally followed that route; but when a new ventilator was opened over the door, the heated air ascending escaped by that opening into the corridor. An upward warm current was thus established through the fanlight, and a downward cool converging current in the ventilating flue.

A question of considerable practical interest in connection with the warming of our houses is the supply of a proper proportion of moisture with the heat. It will not be disputed, says Mr. Jno. K. Allen, of Lansing, that moist air at 68° F. is more enjoyable and better fitted to sustain life than dry air at 80°. Yet in cold weather, with the thermometer below zero, while every heating apparatus is forced to its greatest capacity, we are obliged to breathe a parched air which dries the throat and irritates the air passages, and with it the sulphurous and carbonic gases which are thrown off from the coal, and produced through the overheating of the iron. Besides, it must be remembered that for every degree the air is warmed under ordinary heating conditions its vitalizing force is diminished, and the amount of moisture that needs to be added to make it agreeable is increased. Water may be employed in a twofold capacity to overcome these difficulties. In the first place, it serves to absorb impurities which may be present in the air, and, in the second place, it lends its own moisture to the heated air and renders it more agreeable to breathe. Water may be evaporated in pans of various styles and sizes, or it may be placed in a section of the pipe which conducts the hot air from the cellar to the rooms above. It must be remembered on the other hand, that the more air is heated, the more its capacity for absorbing moisture is increased, and that if large quantities of water are thus evaporated they will afterwards be precipitated and will lodge on windows, walls and other objects in the room. Water pans are also frequently allowed to go empty, or in place of containing pure fresh water put in every few hours, they will frequently be found to contain dirty water, mixed with dust, ashes, rust, etc. Air moistening, therefore, unless carefully attended to is not an unmixed blessing, but with ordinary precautions as to the cleanness of the vessel used and the freshness of the water evaporated we may safely conclude that air moistening not only renders the air more agreeable to breathe, but is also calculated to ward off or to mitigate diseases of the air passages, such as Bronchitis, Pneumonia, Diphtheria, etc.

While strict attention should be paid to the ventilation of every room in the house, it seems clear that the proper ventilation of our cellars should be of the first importance. In winter cellars are closed up as tightly as possible. They are often not drained, and, in addition, decaying vegetable matter adds its poisonous store to the currents of air, which are constantly mounting to the rooms above. If cellars of dwellings are apt to be in this condition, what must be the condition of the basements in stores, factories, theatres, and other public buildings? In summer, should the air of the cellar be offensive, we open the windows and remove the rubbish. In winter we fancy that the air is

pure enough as long as it is cold enough. The same system of ventilation by flues, which has been recommended for the living rooms, applies equally well to the cellar. A vegetable cellar should be connected with the nearest chimney by means of an eight inch stove pipe, and no vegetable cellar should be under a dwelling unless the cellar is well ventilated.

Frequently in reading articles on impure air, one is impressed with the extraordinary importance attached to the poisonous qualities inherent in carbonic acid. In Fownes' work on chemistry we find it stated at page 147, "Carbonic acid is very hurtful to life, even when largly diluted with air; it acts as a narcotic poison. Hence the danger arising from imperfect ventilation, the use of fireplaces and stoves of all kinds unprovided with proper chimneys, and the crowding together of many individuals in houses and ships without efficient means of renewing the air; for carbonic acid is constantly disengaged during the process of breathing, which is nothing but a process of slow combustion. This gas is colourless; it has an agreeable pungent taste and odour, but cannot be breathed for a minute without insensibility following." The specific gravity is 1·524, 100 cubic inches weighing 47·26 grains. An equal quantity of atmospheric air weighs 31·0117 grains. Unfortunately, however, for the house-dweller carbonic acid is not the only impurity of the air with which he has to wrestle; impurities of a more complex nature, escaping from the clothing, lungs and skin of those with whom he is brought in contact, must be added to the sum. These impurities are dangerous to health, but they are difficult of detection. So that the detection of any undue quantity of carbonic acid in the atmosphere of a room may be taken as an indication that other more important impurities are also present. Fortunately for man, the Great Creator, in permitting this deadly gas to issue from the lungs of breathing creatures, has endowed it with a power of diffusion, which prevents it from exercising its poisonous power. If it were not for the existence of this law of the diffusibility of gases, carbonic acid, which is much heavier than air, would, by sinking to the lower levels of the earth's surface, have long since brought about the extinction of species. But on the contrary, after leaving our lungs it rapidly diffuses itself through the air of the room, being present in the air at the ceiling just as abundantly as in that next the floor. It would seem, therefore, from these considerations, that the more civilized we become the more intricate are the problems which are submitted in connection with our health and welfare. The log shanty of the early settler offered fewer difficulties in the way of efficient ventilation than the more pretentious brick dwelling, which shelters his declining years; but his children must see to it that the "house beautiful" is not deprived of pure air and converted into an air-tight box, instead of a dwelling fit for human beings. By looking closely into this matter, and putting your good resolutions into practice, you will not only contribute to the health and longevity of your families, but you will do much to prove to the incredulous that, even in this northern region, it is possible to live comfortably and yet healthfully; to breathe pure air and yet to have it properly warmed; and even when the landscape is dark and chill you may, by a not too violent stretch of the imagination, fancy that you are rejoicing in the pure warm air of summer.

Dr. Yeomans, referring to Dr. Cassidy's paper, said that Consumption is essentially a disease of indoor life, and was the largest cause of death in Ontario last year. Great attention should therefore be paid to house ventilation, and Dr. Cassidy's paper he hoped would be printed and widely read.

Mr. Miller regretted that the majority of our schools were built almost entirely without any regard to ventilation.

Some considerable discussion on the subject ensued, and a vote of thanks was passed to Dr. Cassidy for his able and carefully prepared address.

On motion of Dr. Oldright, thanks were conveyed to the County Council for the use of the Court House, to Mayor VanBuskirk for presiding, and the railway companies for reduced rates.

The Convention then finally adjourned.

PETER H. BRYCE,
Secretary.

ARTICLE III.

TYPHOID AND SOME OTHER ZYMOTIC DISEASES, THEIR CAUSES AND PREVENTION.

BY DR. P. H. BRYCE, M.A.

(A Lecture Delivered under the Auspices of the Mechanics' Institute of Galt, October 10th, 1882.)

MR. CHAIRMAN, LADIES AND GENTLEMEN,—In appearing before you to-night, in the capacity of a lecturer on Public Health, it may be deemed proper that I should explain how and why I appear in this capacity. Having been appointed under the terms of the Public Health Act of 1882, Chief Health Officer of the Province, I have conceived that one part at least of my duties should be to, as far as in my circumstances and with my ability may be possible, bring before the general public, in what ways be deemed best, certain facts concerning the causation of what we may call Preventible diseases, and endeavour to induce the individual public to take such means as may best tend to prevent them.

To this end, having made a proposal to your Institute to address a Public Meeting on some subject relating to the Public Health, it was cordially agreed to that I should appear before you under its auspices to-night. I can only say in the outset that I do not intend to be the apostle of any new creed, to introduce scientific theories as yet not promulgated, nor in any way seem to usurp any medical rights which my professional friends may have; but rather I shall endeavour to build upon well-laid foundations, to strengthen the hands of your medical gentlemen in their Samaritan work of mercy, and to encourage the public to arouse themselves to action in combatting by methods alone possible to them the advance of those epidemic diseases, which, since history began, have proved themselves to be more fatal than volcanic outburst, destructive avalanche or the awful carnage of internecine strife.

Understanding that the health of your town has been suffering of late from the presence of serious forms of fever, I shall speak more particularly of "The causes of Typhoid Fever;" but may, if time permit, say something as to some other Zymotic diseases often prevalent in our communities. Still I hope it will be understood that most of the following remarks will hold good for the various other Zymotic diseases in common with Typhoid.

The advance made by Science in the accurate location of the causes of many diseases has in the last twenty years, through the perfecting of chemical processes and microscopic methods and the accurate and extended study of metorological conditions, been simply marvellous. What suspicions the pondering of many facts gave to the careful physician of forty years ago, have become confirmed principles to be acted upon by the scientist of to-day. In no field, however, have there been more obstacles to overcome, and in none have there been so many or more earnest workers, than in that of the difficult problems of the causation of disease. But on the scientific mind, which, like a photographic plate, has been gradually cleansed by the effort to think rightly, impressions of the truth and the correct comprehension of facts are gradually appearing.

Causation of Zymotic Diseases.—To this problem, then, let us first address ourselves. The term *Zymotic*, which is the term now commonly applied to what may become epidemic diseases, may be defined as being derived from a Greek word *zyme* meaning *ferment*, a word which is now, however, looked upon as synonymous with the word *germ*, which means, as commonly understood, the basis from which anything is developed. These terms, however, are such as might serve as a scientific way of expressing any cause however indefinitely understood. But our scientific workers could never have been satisfied with such indefiniteness, and it is through the united labours of many that upon the world of

the invisible light has been shed. Let me illustrate in the simplest way possible what is meant by the scientific word *zyme* or germ.

All know well that what is called *yeast* is a something which has the property of exciting fermentation in any substance containing sugar. But probably our most capable housewife would be unable to inform us of more than the fact. She would know little of the *how* and the *why*.

But as the *how* and *why* have the greatest possible importance in the question we are to consider to-night, I shall try and tell you something of the "how and why."

Take some yeast and strain it through a coarse filter and it appears as a brownish fluid without any solid particles. But add some of it to a clear solution of sugar, keeping this warm, and soon the mixture becomes frothy and begins to give off bubbles of gas. It gradually loses its sweetness, gets an alcoholic flavour and intoxicating qualities, and supplies a fluid which burns. Dry this fluid and it yields a powder which, if kept dry, retains the power of producing fermentation for a long time. Heat, however, the yeast up to boiling point before adding it to the sugar solution and no fermentation follows. The boiling has destroyed the powers of the yeast. Sugar will not ferment without yeast, and if it does without yeast being added then some air containing yeast particles has come in contact with it. Singular as it may seem, if we filter air through wool and let it come in contact with the solution the latter will not ferment.

(1) We thus see that in yeast there is a something which provokes fermentation.

(2) That the something has its power destroyed at a high temperature.

(3) That this something consists of particles which can be filtered out of the fluid.

(4) That they may be in air and may be filtered out by its being passed through wool.

Now, a drop of yeast under the microscope will tell us what these articles are. Even a hand-lens shows particles like sand in the fluid; while a magnifying power of 500 diameters reveals their true character. Each little particle called a *Torula* is seen to be a round transparent body from $\frac{1}{25}\frac{1}{00}$ to $\frac{1}{70}\frac{1}{00}$ of an inch in diameter. Each is a little round sac with a semi-fluid matter inside, and if the sac burst little granules diffuse themselves through the fluid.

Strange as it may seem, each of the little granules inside, if in the warm sugar solution, will grow into a sac like the first; and, as already remarked, the clear sugar solution will soon become turbid. We thus see that the yeast has grown, and when a mass of it is burned and analyzed it is found to be composed of materials similar to those in *white of egg*.

Now since this minute particle has grown and has used up a considerable amount of the sugar solution, has produced alcohol and bubbles of carbonic acid gas, it is evident that it must have grown by feeding upon the solution of sugar. If then these little sacs or cells absorb the constituents of the sugar solution and change them chemically it must be because they are living bodies. Hence that the particle is alive, and proved by its cell-wall, composed of cellulose, to be a plant, and to be capable of absorbing these materials for its growth, utilizing the oxygen and giving off carbonic acid, seems evident.

I have detailed, ladies and gentlemen, the *why* and *how* of a process you all know something about as a *result*; and I have done so, in order if possible, to make plain to you the process of action which is carried on by minute cells, such as the Torula or yeast-plant, and which, developing in infinite quantities from a single particle, may in the best sense be called a germ or *zyme*. I have stated this view since it has now become fashionable to say that *germs*, *bacteria* or *microbes* have caused this or that disease in the way that I have already shown you. Of such germs there are various species diffused through the air and wafted often long distances; some flourishing at one temperature, some at another; some feeding on animal and some on vegetable matter; some upon solid matter, some on air alone; some needing light, some darkness; while many are constantly diffused in air ready to multiply a million-fold whenever circumstances may be favourable. Beale remarks that the various germs of vegetable origin, which it is supposed give rise to disease with various characteristics, are present in the blood; and he further remarks that in the primitive stage these have no distinct characteristics by which they may be distinguished, and whatever differences they may have in the developed state there are none perceptible in the embryonic condition.

Thus then we have illustrated the life and qualities of a germ, and I trust all have

been able to understand the steps as we have proceeded. But as we would naturally suppose there are various species of these fungi and other microscopic plants, growing and multiplying under different atmospheric conditions, different degrees of heat, in different fluids and substances, some in light and some in darkness.

Thus we have *Protococcus pluvialis* in old eave-troughs, water tanks, shallow pools, etc.; *Penecillium glaucum*, familiar as the mould on bread, jam, old boots, etc.; *Mucor mucedo* on manure heaps, etc.; *Aspergillus* on certain unhealthy epidermis, etc. Another class of low organisms, however, which from their shape have been named Bacteria and which usually are of exceeding minuteness ($\frac{1}{10000}$ to $\frac{1}{80000}$ of an inch in diameter), is that wherein have been placed most of the germs, which according to many are the seeds of our various epidemic diseases, such as Smallpox, Diphtheria, Typhoid, Cholera, etc.

Now, I trust that my previous remarks will have brought us to a point where all will see that it is quite reasonable to suppose that as Torula grows in sugar solution—Protococcus in moist earth mould, and as Mycoderma Aceti seems to produce vinegar, so there may be other germs, call them as you please, Bacteria, Bacilli, etc., which grow in various fluids, some in the blood of animals, some in the blood of man, some in saliva, some in the fluids of the stomach, intestines, etc.; and that of necessity—since for their growth they feed upon the fluids they are situated in—these fluids must be altered in quality to a greater or less extent and thus produce, we may fairly infer, the phenomena of various diseases.

Let me endeavour to illustrate by a reference to some of the researches of Pasteur, the great French chemist, so lately honoured by being elected one of the "Forty Immortals" of the Institute of France.

A number of years ago he was employed by the French Government to investigate the cause of *Charbon* or the splenic disease or malignant pustule in cattle and sheep, and which had been epidemic, destroying thousands. He found that it was most prevalent in fields where animals previously sick of it had died and been buried. What could have caused this? He took some and fed them with the grass growing over the graves of their fellows, and these became infected, while others fed upon grass from another part of the field remained healthy. But the difficulty in connecting cause and effect was due to the fact of these animals having died years before, and having been buried ten or twelve feet under ground. He at last solved the difficulty by that inspiration, which so often strikes the mind of the inductive reasoner. He took the material from the intestines of earth-worms, found in the soil of the graves, and injected a solution of it into the veins of sheep, when the disease was produced. Here earth-worms had been the Charons, which had borne the deadly germs across the humic Styx; and in the earth thrown out on the grass had deposited the *materies morbi*, which had produced death in the sheep.

Such germs have been proved to be the Anthracis baccillus, a microscopic germ, rejoicing in the proportions of $\frac{1}{80000}$ of an inch.

Dr. W. Budd has, to all appearances, come to a similarly definite result in the question of the causation of Typhoid.

Tomasi-Crudeli and Klebs have apparently located the germ of Malaria in a microscopic plant called *Bacillus Malariæ*; while Drs. Wood and Formad, of Philadelphia, in a long series of researches, have to all appearances isolated the germ of Diphtheria, *Bacillus Diphtheriæ*. More recently still Koch, of Berlin, claims to have proved Tuberculosis to be a Zymotic disease from the fact that he has discovered in the sputa from the lungs of consumptive patients the germ *Bacillus Tuberculosis*.

But, ladies and gentlemen, neither is there time nor is this the place to argue theories. I have in a few words defined and illustrated what is now commonly termed a zymotic disease. Let us at once confess that all is not yet decided; that though it is apparently beyond dispute that certain fungi or vegetable organisms—which like the corpuscles of the blood develop very rapidly—are present in disease; and that, though some have even defined between them microscopic differences, still the conclusions are not accepted by all.

Dr. Beale, probably the greatest master of the microscope in Britain, while admitting the germ theory of disease, does not accept it in the ordinary sense, and for several reasons.

In his great work on Bioplasm or Germinal Matter, *i.e.*, formative living matter, he states with great appearance of truth, that fungus germs (Bacteria, etc.) of exactly the same microscopic appearance as those found in the system, are always present in the blood during such diseases as Typhoid, Diphtheria, etc. But he believes that they are present because the blood has in the multiplication of the germinal masses of bioplasm already in it become so changed as to form a favourable feeding ground for the inhaled bacteria of the air, since the same *bacteria*, *vibriones*, etc., are found present in the mucous tissues and in the blood during various diseases, such as Typhoid, Diphtheria, Scarlatina, etc., while at the same time the phenomena of different diseases may be present. Hence Beale makes the following important distinctions :—

(1) The disease germs, which entering any system cause contagious diseases, are minute particles of bioplasm or living germinal matter, which have been developed and existed in some other living body.

(2) They consist of minute cells of low grade of *being*, practically indistinguishable under the microscope, even as cells of blood forming new muscle, connective tissue, etc., are indistinguishable ; but which, by virtue of inherent qualities, develop in some cases one disease in some another.

(3) Having been introduced into the system in one or more ways, if they find abundant food, they develop with less or more rapidity, altering blood constituents, as in the case of yeast and sugar, producing the phenomena of disease; and that blood in this state is most favourable for the development of bacteria in it, being inhaled from air in which they are ever present.

(4) Of course these disease germs are endowed with very different vital powers, even as pus in various degrees of development is different in its vital properties and infectious qualities. The distinction is that according to the *Bacterium* theory, microscopic beings, animal or vegetable of their own peculiar species, are introduced into the system, feed upon its fluids if favourable, exhaust themselves by lack of nutrition, or before this stage arrives destroy the patient.

He says that the physicists who think they can see in the size and shape of Bacteria differences which presuppose them to have, on this account, different functions are unscientific ; and moreover Bacteria are in the system at times without any special disease, and that inasmuch as they are always in the air such diseases would long ere this have destroyed the race.

Although much acuteness of observation has been shown by Beale as evinced by his theory, yet on the whole to me the bulk of proof seems to be on the side of the Bacterium theory, for :—

(*a*) By analogy we have different vegetable germs with different functions, such as Torula, Protococcus, Penecillium, Mycoderma, etc., present in varying amounts in air at different times under different circumstances.

(*b*) In very different amounts under the same circumstances (Tyndall).

(*c*) Even if present they have different degrees of vitality, like vegetable growths, due to a favourable *nidas*, or the presence of various opposing causes.

(*d*) Even though not physically distinguishable, it is as proper to suppose them as having various properties as to suppose his bioplasmic particles, impossible of differentiation, to have different qualities.

(*e*) Inoculation by cultivated *bioplasm* in Diphtheria, Malaria, Tubercle, Vaccinia, etc., produces these respective diseases.

(*f*) Some germs, as Typhoid and Cholera, seem to require exposure to the air in filth or excrement in order to develop fully their virulence.

(*g*) Many if not developed in filth, at least appear to remain vital in it.

(*h*) Favourable circumstances for their appearance, as filth, climate, constitution, often find such diseases absent.

(*i*) Circumstances most opposed to their appearance may have them present, but generally weakened from lack of *pabulum*.

(*k*) The virulence of these diseases, great at first, weakens with the passing away of climatic conditions favourable to germ growth, or from the exhaustion of filth materials for food.

Such then are a number of reasons for my belief in the *Bacterium* theory of many diseases; while at the same time Dr. Beale's theory has much plausibility as explaining spontaneous appearences of these diseases, or the continuation of heriditary diseases.

How introduced into the System.—From what we have seen of the almost universal distribution in ordinary air of yeast germs $\frac{1}{50}\frac{1}{00}$ of an inch in diameter, and how Protococcus Pluvialis, $\frac{1}{50}\frac{1}{000}$, is almost everywhere in moist mud, it will not be surprising to find that *Bacteria*, which we believe to be the specific causes of diseases, are present in air very generally, unless where, through their not having found favourable fields for their propagation, they have been destroyed by opposing influences.

Being then so readily diffusible we naturally expect such to be not only floating in air, but to be clinging to solids, as food, and to be dissolved in water. Existing then under these conditions, we can readily see with what ease they may be taken into the various avenues of the system.

But not till they reach the blood do they exert their deleterious effects. Here they grow and multiply, and, becoming obstructive in the smaller capillaries, give rise to the eruptions characteristic of the various diseases. The question of how they reach the blood may however be of interest. Inspired into the minute alveoli of lung tissue, they are almost in contact with the blood. There multiplying, the germs push themselves through the lining membrane, and are taken up by the capillaries. In the same way, swallowed with food or drink, they may get into the mucous follicles and be absorbed by the capillaries of the stomach and intestines.

But further, some, as Dr. Beale remarks, may enter through the pores of the skin. In some states of the system the cutaneous surface is softened, swollen, and moist; hence living particles can easily insinuate themselves into the pores.

Again they may enter by an open wound or scratch, since the minute particles of germinal matter falling upon the wound may there multiply, and thence extend into the soft tissue and into the blood.

Such, ladies and gentlemen, stated in a few words, are some of the principal ways by which these germs get into the blood.

Let us now see what are the *factors* which aid the multiplication of these germs, thereby inducing their fatal effects upon the system.

1. The first of these, which I believe to be of great importance, is a *soft*, moist state of the capillaries with a weak condition of their walls, following long continued congestion, due to a weak heart and enfeebled condition of the nervous system; a state most favourable for the passage of germs. Not only this, but the system is in the worst possible preparation for opposing the multiplication of germs in the blood by a vigorous circulation, which might throw them off by the various secretions. Such a debilitated state of the system, experience has shown, is that which most commonly precedes the attack of any severe form of fever.

2. *The breathing of Impure and Rebreathed Air.*—This factor may appear to many to have little foundation in fact; but the accumulated proof on this point is beyond dispute. Many have become so accustomed to living in small and poorly ventilated rooms—having, too, stoves and double windows in the winter—that to affirm there can be anything injurious in this way of living, is, in their opinion, simply to talk nonsense. But let us see! The requirements of a room ten feet square, in order that its air may be kept pure, are that the air be renewed three times per hour for each person in the room; otherwise he is breathing an excess of carbonic acid, which, resulting from decomposition of tissue, has been exhaled from the lungs. Not only this, but the air of any room has much dust in it. This dust, according to Dr. Fox, in his work on "Water, Air, and Food," contains: scales of epithelium from the body; particles of soot; small round cells or "putrefaction cells," capable of multiplication, the growth of which is aided by the bad smelling gases of ill-ventilated rooms.

Now it is evident that the blood of persons in such rooms, must not only be insufficiently oxidized to keep it vigorous and freed from its waste tissue, but that the lungs are actually receiving into them rebreathed air, loaded with organic impurities. So deleterious is such air, theoretically and practically, that Dr. McCormack, of Belfast, years ago affirmed this to be the principal cause of consumption; and our own statistics

prove that amongst women, whose lives are spent so much within doors, this most fatal disease of the calendar finds its most numerous victims.

How can it be otherwise? Not only is the body kept from being invigorated by abundance of oxygen, but it is being directly empoisoned by bad air; and assuming that germs of any disease (say tuberculosis, according to Koch's theory) be present, we can understand how, the germs being breathed again and again into the lungs and living in an atmosphere loaded with organic matter favourable for their development, they can hardly fail to accomplish their fatal purpose.

Lemaire found living organic germs especially abundant in the air of dirty prisons; while everyday experience proves that *fungi* of every kind find rich pasturage in both filthy ground and filthy air.

We now must make a few remarks on filthy air.

3. *Filthy Air.*—As our argument in favour of the *zymotic* origin of disease has taught us to expect, experience proves, only too conclusively, the truth of the theory, that these diseases are ordinarily an accompaniment of filth. Hence these have been well characterized as filth diseases.

We may here take a remark from a paper by Mr. E. Chadwick, C.B., the well-known sanitarian of London, on "The Prevention of Epidemics." He says, "Asking the medical officer what was the specific disease he apprehended, he stated that when he arose in the morning and found the atmosphere warm, moist and stagnant, he always found that there would be an increase of some foul air disease; it might be Typhoid, it might be Scarlatina, it might be Measles, it might be Smallpox; but one species or another of eruptive disease he was sure to have in such weather in the low-lying and ill-drained districts. * * * * * * * On passing through a low district I observed, '*surely this must be a fever nest*,' when out came some children with the marks of recent Smallpox upon them. I remember that I was once consulted by Dr. Lyon Playfair as to the readiest mode of making a sanitary inspection of an urban district without the Medical Officer's or Registrar General's returns, which there was no time to get out. I advised him to go into one of the primary schools, and select a group of the most squalid children, get their addresses, and go there. He told me he had acted on this suggestion; and that in the first school there were two boys with particularly blotched faces, and he had found that their habitations were at the confluence of some putrid sewage. On ill-paved, ill-cleansed, and filthy streets, the attacks are heavy, especially amongst children. On well-paved and well-cleansed streets the attacks are light; and it was observed that epidemics pass over those clean lines."

4. *Impure Water.*—But if filthy surroundings make filthy, impure air, what must the effect upon water be? Let us think for a moment! Take your own town for example, situated along the river valley with an underlying impervious limestone, in many places hardly covered with soil. The water must drain readily from the hill-sides toward the river. Hence it partially soaks into the soil carrying with it whatever organic materials may have become dissolved in it. Accumulated materials from the surface are borne down with it; as also, in some places, the drainage from cesspools and privies high on the hillsides into the soil lower down. Wells thus receive these impurities, and the water becomes contaminated.

Now should there have been one or more cases of Typhoid occurring on such high ground, and the excreta from such cast, without disinfection, into a cesspool draining downward, with its soakage entering into some well, we have present every element for the spread of the disease.

But perhaps the greatest misfortune in such cases is that water may contain the fatal germs of disease, and yet be sparkling and pleasant to the taste. In cases, however, where the water is malodorous and bad tasting, its peculiarly dangerous nature may thereby be detected.

A remarkable fact seems to have been established by Professor Bühl, of Munich, proving that an intimate relation exists between the prevalence of Typhoid and the height of underground water. In an article in the *Weitshrift fur Biologie* he remarks:—"The variation in the mortality from Typhoid necessitates the assumption of a coöperating cause sometimes assisting sometimes counteracting the specific cause of Typhoid Fever, and

which, on its quantitative side, exists as the basis of the extension and force of the disease. But of all the elements accessible to investigation the changes in the height of underground water especially exhibit relations unmistakeably indicating their connection with the spread and violence of Typhoid. So long as the underground water continues to rise the number of fatal cases of Typhoid Fever steadily falls, and *vice versa.*"

He does not seem to have stated the theoretical reasons for this, but as they have a practical bearing on the subject, I may be pardoned if I state on what grounds these statements seem to rest.

(*a*) When the soil water is low during dry weather the water of cesspools, etc., will, by capillary attraction, readily spread laterally towards deeper openings in the soil such as wells; since, were the water high, and the soil already saturated, the lateral spread of water from such sources of pollution would be comparatively slight.

I may here state a historic case of how contaminated water is the carrier of fever, and also what great vitality the germs of many of these diseases such as Typhoid have. The village of Lausen, in one of the cantons of Switzerland, had not been visited by an epidemic of Typhoid since the passage through it of the allied armies in 1814.

On the 7th of August, 1872, ten inhabitants were attacked with the disease; nine days later fifty-seven were seized. The epidemic lasted until October. Out of 800 inhabitants 130 were sick, 100 of these being in the first three weeks. The disease occurred only in those houses getting their water from a running stream, those using well water escaped. It was afterwards proved that the privy and manure heaps of a house at some distance had discharged their contents into a stream which had subterranean connection with the sources of the stream which ran into the village. In this house on July 10th, a man had been attacked with Typhoid, and later three more cases occurred in the same house.

(*b*) Besides the height of water according to Bühl being an important factor in determining the prevalence of Typhoid, etc., Louis Créteur, the Belgian chemist, has found that the more porous the soil is, the more rapidly does organic matter decay therein; and the more readily does the circulation of air and water proceed. Hence such a soil is most abundantly inhabited by the lower forms of life.

Pettenkofer shows that in such soils there is an atmosphere richer in Carbonic acid than in air above ground; and that the underground air is affected by currents, temperature, etc., in the same way as air above the ground.

5. *Influence of Winds on Disease.*—That winds have an influence in promoting disease has long been a popular fancy; and that this has some foundation in fact is beyond question. Thus the prejudice which has from early times been shown against east winds is well known; and that the prevalence of such has seemed to be attended with troubles of the respiratory organs, etc., is well known. But whether, beyond its generally cold and damp character, it possesses any peculiar and special influence in the causation of disease is not as yet very evident.

However, we do know that the course of epidemics of wide prevalence has in many cases been in the direction towards which some wind has blown more or less constantly. This, for example, has been observed frequently with Influenza. Some remarkable instances showing this fact have been given by Mr. E. Chadwick, C.B., in an address previously referred to. He there expresses his belief, in most unmistakeable language, that certain climatorial conditions have determined not only the course but the virulence of some Cholera outbreaks. He does not analyze these conditions. He cites, however, the fact that in Germany and Russia there has been a so evidently unhealthy condition of the atmosphere with some Cholera outbreaks that the rooks disappeared with their advance and returned as they receded. He supposes that they must have been conscious, either by smell or some instinct, that there was danger in remaining in the atmosphere. He further remarks that in India, at any rate, such aerial conditions move in certain directions. Thus Cholera appears usually to move towards the north-west. It passes from village to village even though there has been no intercourse between them. It passes across arid deserts with such steady course that the time of its arrival on the opposite side may often be foretold.

But he confesses that, though this be true, the contagiousness of Cholera by contact

is sufficient to spread it in all these cases. Hence we must ask, what does the wind do in inciting disease?

We know it may bring cold and damp, chilling the body and so inducing many disorders. I have been credibly informed by a practitioner of long standing that, where Diphtheria is at all prevalent, it seems to break out with renewed violence after high, cold winds. No doubt, however, the general effect of high winds is good in that they tend to lift organic particles upon which germs of disease feed, into the air, and so aid their destruction by oxidation. This process however, like many others fraught with good, mixes the bitter with the sweet, since germs that lie quiet and harmless are thereby disseminated. Thus the *miasm* of marshes has again and again been found to extend in the direction of some prevailing wind; and that it is a material something is proved by its progress being often impeded—even stopped by forest areas, or even clumps of trees. But we may readily assume that in other diseases besides Malaria there are living germs. Thus:—

(*a*) In some of the worst outbreaks of Cholera there has been previously a long period of calm, during which the air has become laden with organic material, and this being more or less unoxidized has afforded abundant food for the development of disease germs.

(*b*) In such calms there is too often an undue absence of ozone, the active oxidizing agent—an additional reason being thus supplied for the increase of germs.

(*c*) The disease which has, as an epidemic, progressed in a certain direction with the wind cannot be carried backwards to any great extent even though it be infectious, the reason for this appearing to be that, as in the case of an outbreak of Cholera among the troops returning from Afghanistan, the food or organic matter upon which the germs are nourished has been destroyed either by ozone and air movements, or that the first spread of the germs has exhausted the supply of organic nourishment. This latter explanation is in keeping with the fact that in epidemics it is commonly in the early periods of them that the greatest violence is attained. This fact, however, may be partially explained by people appearing to become more or less acclimated, when they have been exposed for a length of time to air bearing the germs of some specific disease.

6. *Influence of Temperature.*—The influence of this is deserving of a short notice. Believing as we do in the germ theory of disease, we can in some degree undertand why some diseases are more prevalent in cold weather and some in warm, some in moist aud some in dry weather, by reference to the life history of the higher plants, to biological facts, and to statistics.

Thus some plants flourish only in a tropical, some in a temperate climate; while others again, like the red snow of the Arctic Circle, flourish only in frigid regions.

Again we know that yeast may be rendered inert at a temperature of 212° while Bacteria, Vibriones, etc., flourish in fluids which have been heated up to 300° F.

Further, Intermittent Fever germs have their activity destroyed by frost, and Diarrhœa increases rapidly at a temperature higher than 60° F. Smallpox and Typhus seem to have the activity of their germs rapidly lessened by the influence of summer heat; while the Typhoid wave beginning to rise in August attains its maximum in November.

Whooping-cough, again, increases from December to April, and then recedes; while Scarlatina, increasing with June, reaches, according to British statistics, its climax in October.

Hence we can readily see that in disease there are certain factors necessary for its development, such, for instance, as different races of men and animals, and different temperatures and surrounding conditions.

Having now discussed at length *zymotics* in their nature and causes, it becomes necessary for us to turn our attention to their effects and prevention.

The effects of these diseases are only too mournfully evident to all to need amplification; but it may serve to impress upon us what this sickness and death from preventible diseases means, by stating that in England and Wales, imperfect as are their sanitary improvements, the death rate has been reduced by them by four and a half per cent., at a saving annually of a quarter of a million of lives, and three million cases of sickness. It has moreover, in a material sense, saved some four million pounds of money in medical and funeral expenses—not mentioning the untold value of the labour which is preserved to the country.

Should these figures, however, seem incredible, let me give you a single example from our own mortality tables. In 1880, with a population of about 2,000,000, there were recorded 822 deaths from Diphtheria alone. Not to speak here of sad memories and desolated homes, nor yet of the cost of medical services and funerals, we need only refer to the material loss sustained by the country in the *productive* power of these many lives, each male in Canada being calculated as yearly producing wealth to the value of $400 to the State.

Precautions against the Outbreak of Disease.—To this part of our subject, ladies and gentlemen, I have no doubt but that your interest and attention will most willingly be given. Not alone in the periods when epidemics are present will you, I trust, deem it necessary to take precautions against them, but you will endeavour to exercise that care, by which alone we can hope even to lessen, much less to eradicate, these dread scourges. We may then first direct our attention to the conditions in which we all daily live, move and have our being. And we cannot do better than begin at home.

We have already seen how imperfect ventilation debilitates not only from its causing an absence of oxygen, but also an excess of carbonic acid and of other animal exhalations from the lungs and skin. In addition to this we have seen that impure gases from our stoves in winter, and burnt and dried dust from our over-heated furnaces both tend to enervate and weaken the powers of the system to withstand the attacks of disease. To these we must now add the fact that modern conveniences have placed our water-closets in many cases in our houses, and in every case have connected our sinks with cess-pools and sewers, with the danger ever present of contamination of the air of our rooms by the volatile products of organic putrefaction. To these I may add another most important factor—the presence in many cases of damp air continually rising, with the unwholesome products of organic decomposition of the soil under our houses, into the rooms by the draught which supplies air in the place of what passes up the chimneys. The same danger lurks in our cellars, too many of which are not kept in a clean and healthy condition.

Presupposing then, that all recognize these facts, our duty must be to adopt means for their prevention or removal. And amongst these means we place first *ventilation.* Fortunately for us we have in our houses a large amount of *spontaneous ventilation.*

Prof. Pettenkofer has shown that through a room of brick walls of 2,650 cubic feet of area, every hole of which has been plugged up, 1,060 cubic feet of air passed per hour, by virtue of the difference of temperature (34° F.) between the outer air at 32° F. and the inner at 66° F.; and that, with a difference of temperature of 92° F. between the outside and inside of a room, the spontaneous ventilation through a free wall amounted to about seven cubic feet per hour. This is due to the porosity of the ordinary building materials such as limestone, brick and mortar. The amount of this ventilation depends, of course, largely upon the walls being kept free from damp. In addition, however, to this, and in a much more important way, we have spontaneous ventilation to a large extent in winter by means of the cracks in our floors, under the doors, about the windows, etc. In this connection I may mention what, in my opinion, is a bad result of one modern convenience—I mean *double windows.*

Let me illustrate. Their use is, as we all know, due to there being between the two windows a stratum of air, which is but slowly influenced by the cold air outside or the warm inside air; in fact it keeps the cold air out, the warm air in. But what is the effect of such an arrangement with the temperature of an ordinary winter's day of, say, 66° to 70° inside, and 25° to 15° F. outside the house? There is, by the rise of warm air in the chimney, a rapid emptying of the room of its air, which air must be replaced from some source. Now, if the windows are almost completely impervious, there must necessarily be a great draught of cold air through the cracks of the floor and under the doors, which cold air, entering the room at the bottom, must largely be kept there by its weight; hence the result so commonly seen, that our ladies, and indeed all, are constantly troubled with cold feet—of all causes I believe the most fruitful in the production of colds and their attendant evils. Here then, we must see, is one fault in ventilation readily prevented. Let what air will enter by the sides of our ordinary windows—it enters gradu-

ally and, as it descends to the floor, becomes warm, and so the temperature of the room is equalized.

But we must proceed farther. With proper precautions against a draught, in the shape of a screen, abundance of fresh air will enter if the upper sash of the window be slightly lowered. Now you will perceive, ladies and gentlemen, I am speaking in a practical way, and not proposing any expensive, and therefore impractical, scheme, but one which all may take advantage of. No doubt something in the shape of an air shaft in the chimney, by which the fresh air is warmed ere its introduction into the room, is better; but many here, from the way in which there houses are built, would find this both expensive and difficult.

Again, let there be for two hours a day an opening in succession of windows in bed-rooms, etc., whereby great draughts of fresh air may not only replace the contaminated air of bed-rooms and sitting-rooms, but by means of which a thorough oxidation takes place both of the animal exhalations which are being continually thrown off from the bodies of the inmates, and of the vegetable odours, which too often permeate the rooms from the kitchen.

Then, too, there are the impurities from illuminating and coal gas,* etc., which ought to be removed.

As Dr. Cameron, Professor of Hygiene in the Royal College of Surgeons, Ireland, says: "The great advantage of keeping open every window in the house for a few hours daily is the admission of so large a quantity of air whereby the organic matter floating in the air of the apartments cannot escape oxidation. The organic matter given off from animals requires prolonged exposure to pure air before its noxious properties are perfectly destroyed." To illustrate the value of this procedure, he remarks "that wind, travelling even at the rate of one mile per hour, and allowed to pass freely through a room, renews the air in it 270 times in an hour."

Such, then, is the first precaution which we are to look to if we expect to advance far in our task of repressing disease.

We next come to conditions *external to our houses.*

Here it hardly seems necessary to speak of the wisdom of cleaning away filth. Apart from its injurious influence, it is unpleasant to both sight and smell; but more than this our own experience, as well as that of every writer, tells us that in crowded, filthy surroundings, where little sunlight and insufficient pure air can get, zymotic diseases find most abundant pasturage. But I must advert to one point, and it is one which our studies have already brought us to, viz.: the wisdom of locating our wells—if they must be used—on higher ground than the privies, where, if possible, the drainage is from the former towards the latter, and in any case to have the well at least 100 feet from all privies, cess-pools, manure heaps, etc. If an out-door system of closets must be made use of, then let deodorants and disinfectants, such as ashes, etc., be utilized. If soil-pipes and sewers be used, then it must be seen to that the air of decomposing sewage be prevented (by having traps on the house drain, etc.) from rising into the house.

But on this large subject of sewerage I must defer further remarks than to say that I believe open street gutters, with all their unsightliness, are much better than sewers into which people run their soil-pipes and drains, without proper precautions to keep the sewer gas and germs developed in the putrescent sewage materials out of the houses. Indeed, the idea that out of sight means absence is no longer pardonable in the light of modern science. Many, indeed, in our smaller towns, seem to have taken the greatest pains to make sure of getting an outbreak of Typhoid introduced into their houses by providing a safe passage-way thereto by house-drains for the germs of whatever disease may have been prevalent in other parts of the town.

Prevention of Diseases from extending when once present.—To this point I must be pardoned if I ask my professional brethren, as well as the public—their patients—to especially address themselves. After these various hygienic precautions have been taken, it will occasionally occur that carelessness in some one of many ways has introduced a case of some zymotic disease into the town.

* The burning of an ordinary gas jet gives off 45 cubic feet of carbonic acid (CO_2) in an hour, or about three times as much as a man.

This, then, being the case, I say to the general public to at once get the advice of your medical man, and second to the medical man I say, where there is any probability of any zymotic disease being present in its initial stage, let the parents or family be earnestly warned as to their duty. Let the patient be isolated, placed in an upper room, and let none but the mother or nurse visit the sick-room. This having been done, let every other person who has been in the house be thoroughly disinfected by having his clothing subjected to the fumes of burning sulphur. As in most cases of children's diseases the other children of the family where one is sick have been already exposed, let these be kept from school, and apart from all other children.

As to the Sick-room.—Here we have opportunity for the greatest care or the greatest carelessness being exercised. But the directions in this regard are so clear, unquestionable, and imperative, that none can afford, either for the sake of their own households or of the public health, to neglect any one precaution. I cannot do better than direct your attention to the concise, yet ample directions given in the pamphlet issued by the Provincial Board of Health. Thus:—

"The bed-room of a person sick with Scarlet Fever, Diphtheria, Smallpox, or any other infectious disease, should be cleared of all needless clothing, carpets, drapery, or any material liable to harbour the poison of the disease. The room should be large, having an absolute air-space of at least 1,000 cubic feet for each individual, and should have a liberal supply of fresh air—at least 3,000 cubic feet per head per hour. In summer the supply should be unlimited; windows thrown open, and draughts on the patient prevented by a fine gauze or wire netting, slanting from the top of the sash to within two inches of the ceiling.

"Discharges from the throat, nose and mouth should be received, or immediately placed, in vessels containing some of the disinfectants named for that purpose in sec. 8; if on rags or handkerchiefs, these should be immediately burned. Likewise, the discharges from the kidneys and bowels should be passed into vessels containing a pint of disinfectant, and immediately buried at least a hundred feet from any well or other drinking-water supply. If these precautions are impracticable, let the discharges be passed on old cloths, which should immediately be burned.

"For convenience, a few disinfectants are here grouped together:—

"(1) Solution of chlorinated soda (or lime).

"(2) " chloride of zinc: water, 1 gal.; sulphate of zinc, 4 oz. common salt, 2 oz.

"(3) Copperas solution—1½ lbs. commercial sulphate of iron to 1 gal. water.

"Purification of Clothes and Bedding.—The best plan, where practicable, is by the agency of heat. Dr. Henry, of Manchester, disinfected scarlet fever clothing by exposure to 212° F. for one hour. A brick oven or portable furnace will answer the purpose, the clothes to be disinfected being hung on wires. Boiling clothes is not so good as baking, but still is useful. To every ten gallons of boiling water add half or three-quarters of a gallon of commercial solution of chloride of lime; or the clothes may be laid for twenty-four hours in a solution of sulphate of zinc in the proportion of 1 to 120, or of chloride of zinc in the proportion of 1 to 240 (Sec. 8), and then should be washed with soap and water if they cannot be baked.

"Nurses and attendants should be required to keep themselves and their patients as clean as possible, disinfecting their hands frequently by chlorinated soda or other disinfectant. Attendants should also wear cotton or linen (not woollen) clothes or overalls, to which particles will not so readily adhere, and which may be more easily disinfected."

Were these precautions which I have mentioned taken by all, epidemics would no longer be possible. Isolated cases of these diseases might occur, but anything like a general spread of them would be wholly prevented.

Of course, travellers, immigrants, etc., will occasionally introduce some epidemic disease, of which we have a good example in Smallpox; but of this we have an admirable example of what can be done in quickly stamping out epidemics, by the fact that in some five places during the past six months it has appeared in the Province, and in the worst outbreak only some thirty cases were allowed to occur. Could the public be so edu-

cated in the case of Scarlatina and Diphtheria as of Smallpox, these might be stamped out in a similar way. But because these, in their outset, are often mild; because some mild cases of these occur, and hence the diagnosis of them by the physician is not made—and if made, his directions as to isolation, disinfection, etc., are not minutely carried out, or, I am sorry to say, have not been impressed by him with such a definiteness upon the people as to cause them to be heeded—for these many reasons these fatal scourges are allowed to carry on their deadly work.

It is on account of these several facts that it has become incumbent upon the Governments, general and municipal, to take up the question of how to legislate most effectively for the people's good; and to ask themselves the question, does not the people's good so incorporate and comprise the individual good, that it demands that individual opinion should be subservient in such matters to public demands?

The Legislature by the Public Health Act of 1873, and by the amendments to this in the Public Health Act of 1882, has decided this question in cases of wide spread epidemics. It has given municipalities full powers to do as in their opinion seems wise for the public good.

Hence your Local Board of Health has a right, and aught, in the public interest, to be informed of every case of contagious disease which occurs, in order, if possible, that the disease may be traced to its true cause, and that every means be put into play for its suppression. In other words, the patient should at once be isolated, the premises disinfected, and all drains, wells and privies at once examined thoroughly. These latter are special reasons why the Board of Health should have cognisance of the matter, since it can hardly be considered as coming within the province of the physician to make a special examination of these, although we are happy to know that many do so.

But more than this, all cases being reported to the Local Boards of Health, they, by their Health Officers, knowing that some particular localty is most infected, will probably suspect the true cause, say of Typhoid, in some main sewer, or some house which has had fever in it, supplying germs of disease by its drains to neighbouring houses with untrapped sinks and water closets, or by the contamination of some adjacent well.

It seems indeed that the time has come when the judicious action of the Local Board of Health in these regards will be so appreciated that no family and no physician can have any scruples or difficulty in making common cause with the Board of Health in such matters.

We all know, unfortunately, how slow the public are to accord to the Local Board through the Council sufficient remuneration to employ a thoroughly competent man—in fact a physician seems to me to be the only true Health Officer—as Health Officer, a man, to use the happy French expression, *sans peur et sans blame*—fearless and blameless. Why, if we only think of it, the expenses connected with a dozen cases of *Typhoid* would more than pay the expenses of a medical Health Officer for a year; and does it not seem much better that a whole community be slightly taxed and be healthy, than that a smaller number should be heavily taxed and be sick—to speak of nothing more?

It seems proper, then, to urge upon your town the propriety of at once establishing an active and efficient Board of Health—if it has not already done so—with full powers and means for thoroughly and systematically guarding the health of its citizens, with as earnest and untiring zeal as if some hostile army were advancing to the destruction of life and property.

But I have already too long trespassed upon your patience, and am afraid that in attempting so much, that in endeavouring to overtake some of the difficult questions in the causation of disease, I may have dwelt too briefly upon what is of primest importance—that of preventing it.

But in truth, after all, I believe that if we can in some degree come to properly understand what are the chief factors in the causation of diseases, the measures for their prevention are sure to follow.

We have seen how indefinite have been the ideas until very recently, of even the greatest minds, concerning the peculiar agencies which cause disease; we have seen that through the imperfections of scientific methods of research this could not have been otherwise; but we have shown, too, that the light of science is fast illumining the dark abodes

of Nature's mysteries. We have traced the life history; the mode of origin and development of the minute organic beings—germs or ferments, which by their multiplication in the tissues and blood of animals, cause fatal outbreaks of disease, and in our doing this have, we trust, pointed out that in aiding the conditions favourable or otherwise for their development, man himself is largely responsible. Such development we have seen dependent upon debilitated states of the system to which modern social and commercial life so largely tends; upon badly ventilated apartments and uncleanly external surroundings; upon water contaminated with surface drainage and sub-soil pollution; and upon meteorological conditions, either of the dry and hot weather of the summer days, or the bleak and cold winds of the winter months.

But though it may seem as if the old-time myth be true that Jupiter Tonans still shows his hatred to the race of men by presenting to them with modern comforts a Pandora, who, though sweet and beautiful, has brought dire calamity upon the generation of men by taking off the lid from the box whence have come strife and war, plague and sickness, grief and sorrow; still we are made happy by the remembrance that in this Pandora box Hope, gentle and sweet, remains, telling men that with all the woes which they are heir to, they still have her angel presence with them, encouraging them to work, by their virtue lessening human wrong, by labours of mercy alleviating human suffering, and by their abiding trust, helping them to still cry out, like Promethens of old amid the flashing lightning and the loud-pealing thunders of Jove, "the day is coming when good shall triumph, and the power of evil shall be destroyed and crushed for ever."

In this field, then, of Sanitary science, where there is so much room for earnest workers; where by lifting people from physical misery advance may be made in moral progress; where not the physician alone, but every member of the community may do his share in lessening the number of mourners and in quieting the wailful cry of the orphan, I cannot do better in closing than by saying to each, in speaking to all in the words of Goëthe :—

Heard are the voices!
Heard are the sages,
The worlds and the ages!
Choose well! Your choice
Brief and yet endless;
Work and despair not!

Article IV.

SCHOOL SANITATION: ITS NECESSITY AND METHODS.

By Dr. P. H. Bryce, M.A.

(Delivered before a Public Meeting of the Brant County Teachers' Association, November 10th, 1882.)

Mr. Chairman, Ladies and Gentlemen,—In appearing before you to-day in the capacity of a lecturer on public health, I deem it my duty to explain to you how it has happened. Some time ago I received a communication from the Secretary of the Mechanics' Institute of your city, inviting me to lecture, under its auspices, on some health subject; and the evening most convenient for this had been fixed upon as to-night. But the meeting of your Association has prevented the carrying out of the first proposition; and it is only in consequence of the painful circumstances which have prevented Dr. Henwood from appearing before you that I was invited to occupy the time assigned to him. I can only hope that I may in some small degree make up to you the disappointment you will have experienced from that gentleman's absence by, at the most, imperfectly touching upon some topics which Dr. Henwood's well-known ability and long experience would have enabled him to handle in so masterly and able a manner.

I have chosen this subject for several reasons, some of these being the fact that I have already discussed before public audiences within the past three weeks several very important sanitary questions; and again, because the urgency of my present subject is felt most keenly by those of you more especially engaged in the profession of teaching, and because you will most readily appreciate any endeavours to bring such matters before the public with a view to improve conditions which have so direct a bearing upon the health of one very large portion of every community—the school children and their teachers.

Although very many and great improvements have been introduced into our school system since the passage of the new Act in 1870; though great advances have been made in the size and general arrangement of a great proportion of our school buildings; yet there are still so many defects in the every-day management of our school-rooms, either through defective heating and ventilating appliances, or through the lack of knowledge on the part of many who control school-rooms, that reform in some of these directions is not only most desirable, but in the highest degree urgent. In discussing the subject I shall divide my remarks into two parts:—

I. What are the unsanitary conditions almost constantly present in our school-rooms?

II. What practical methods can and ought to be adopted for the improvement of such conditions?

Under the first part we may briefly discuss the following points:—

1. The too great number of children generally present in any school-room.

2. The fact that their developing systems are very impressible, *i.e.*, most susceptible of influences, militating against their healthful progress.

3. The influences which are daily at work promoting, or the opposite, this healthy development.

Under the second part we shall refer to—

1. Methods for the promotion of ventilation, to keep the air, and hence the respiratory passages., clean; and for the equable distribution of warmth, so that the inmates of our schools may not be injured by cold and draughts.

2. Sufficient supplies of light.

Now, it will readily be seen that we have an extended course before us, hence I shall endeavour to dwell most largely upon points deemed most important, passing briefly over others which, though in truth of great importance, are yet on the whole less urgent.

I.—What are the Unsanitary Conditions almost Constantly Present in our School-rooms?

1. *The too great number of children; or, in other words, the overcrowding of school-rooms.*—To at once come to the point, either every individual child, impressed into the school-room from four to six hours every day for ten months of the year, requires a certain amount of air space to breathe in, or he does not. Suppose that he does not; then why not utilize our school space by increasing the number of sittings in each room still further? But practically our School Boards, and the community at large, recognize that each child does require a certain breathing space. Now let us see if scientists have recognized any definite amount of air space as necessary for each individual; and if so, what are their reasons therefor?

The facts, then, practically acted upon are: (*a*) That the act of breathing exhausts the vitalizing elements of air. Everyone has and does experience this in greater or less degree. But let us examine this well-known fact more minutely and most briefly by an experiment. Leave a glass of clear lime water exposed to fresh air and it remains clear. Breathe into it and in a few moments it becomes turbid. Here, then, we have proved that something is exhaled from the lungs which is not present in any great degree in fresh air. All know what this is: carbonic acid (CO_2), a gas composed of C and O, which, combining with the dissolved quicklime (CaO), forms carbonate of lime ($CaOCO_2$), and which, not dissolving in water, appears there as a suspended white powder. But whence, someone asks, comes this carbonic acid? Most here know. It is formed by the union of the oxygen we breathe with materials in the blood containing carbon. Evidently, then, any given amount of air which may be supplied, say in our school-rooms, must contain a limited amount of this oxygen. Hence if we breathed this long enough we would consume all of its O. But this we will see could not be done. Let us, however, turn this fact over in our minds, and by comparison see what results from combustion in another way than in the lungs. Make the experiment which anyone can verify for himself. Light a lamp, and we know that a current of air constantly passes up its chimney; and further, that if gas coming out of the top of the chimney be allowed to come into contact with limewater, the same white appearance is seen as in the previous experiment. Evidently the result is the same in both cases.

One step further to complete our argument. We have by inference concluded that if carbonic acid (CO_2) is the result of the union of the oxygen (O) inhaled with carbon in the lungs, that from a given amount of air the oxygen would gradually be used up. But with the lamp we can prove this experimentally by simply holding a burning match under the perforated holes of the lamp burner, when the flame of the lamp immediately begins to flicker, and if the match is kept there the lamp flame will be extinguished. Two things have occurred here. The match has used up the supply of oxygen which fed the lamp flame; and, further, a warm current of air, composed mostly of CO_2 and N, has passed up the chimney, in both of which gases a light is extinguished. The fact then must be perfectly patent to all that the act of respiration is similar to that of the combustion of carbon, where O is used up and CO_2 is obtained.

The next step in this question of over-crowding is:—But how much O is present, and how much is required in order that its exhaustion and the increase of CO_2 may not impede, much less extinguish, the vital fire obtaining its draught by the lungs? The calculation is simple: every ordinary respiration of an adult takes by inspiration about 30 cubic inches of air into the lungs, almost the whole of whose oxygen is used up; while in expiration the same amount of air is given off, five per cent. of which is CO_2. Multiply these 30 cubic inches by the number of respirations, say 16 in a minute, and we have 480 cubic inches of atmosphere exhausted of its oxygen every minute, and 24 cubic inches of carbonic acid (CO_2) taking its place. This calculation is true, likewise, for the child, since an increased number of respirations and more rapid tissue-change make up for the difference in lung space. But ordinary air contains normally some three or four parts of CO_2 in every 10,000, and the greatest sanitarians state that when the proportion of CO_2 increases to eight or ten parts in 10,000 depressing effects begin.

To give you an example of how CO_2 is increased in crowded rooms, Dr. Angus

Smith, as the results of his experiments, states that in Chancery Court, London, at seven feet above the ground on 3rd March, 1864, the doors being closed, there were 19·3 parts CO_2 in 10,000, and at three feet above the floor there were 20·3 parts in 10,000. Again, in Surrey Theatre, one of the largest in London, there were in the *boxes* at 10 p.m., 11.1 parts in 10,000, and at 12 p.m., 21·8 parts in 10,000 of carbonic acid. Such facts have brought experimenters to the conclusion that each individual requires that a cubic air-space be allowed to each individual equal to a room of 10 feet square, and that to keep the CO_2 in it at a point not higher than six parts in 10,000 this space must have its included air replaced by fresh air three times every hour.

Surely, ladies and gentlemen, these facts stare us in the face with such a stern persistency that we shall set ourselves to work to endeavour to bring about remedies where such are needed—and where are they not? As remarked by Dr. Andrew Wilson, Edinburgh, "It is this CO_2 which is responsible for sleepless nights in badly-ventilated rooms, and it is CO_2 which is responsible for cutting off a large number of children of the poor through inducing early lung disease." I may add that it is this CO_2 which is responsible for the pale and delicate teachers of many of our schools, for that mental and physical fatigue which so disinclines them, especially ladies, to take exercise, and hence by enervating physically induces indigestion and mal-assimilation in its many forms, and, as has been shown by McCormack, of Belfast, and more recently by Dr. Workman, is potent to produce directly consumption, and indirectly mental disease.

But what is true of our teachers is in many ways more largely true of the children of our schools, and thus we are brought to the second point to be considered under Part I., viz.:—

2. *The fact that the developing systems of children are very susceptible to influences militating against their healthy growth.*—In many ways the growth and development of the child is by the ordinary community looked upon as if but little, if at all, different from what goes on in adult life. But I trust that a few brief remarks may serve to point out the enormous difference between the two. In embryonic life the formative powers of the new being are wholly exerted in the development of the fabric—the organic portion of the child. But with birth an enormous development is added to the previous, viz., that of the development of the animal functions. These are developed by the stimulus of sensory impressions, and hence mean a corresponding growth of the nervous system. Habits of observation by every organ are formed. The education of the organs of sense has begun. And here, it must be noticed, is a great field in which the child's education may be advanced by parental instruction. But all of these exercises are developmental influences upon the nervous system. Inasmuch, however, as the exercise of nervous energy means an expenditure of proportionately the largest amount of force, we are not surprised that it is soon exhausted, and that a very large amount of sleep is necessary for the child. Let this be disturbed in any way, and injurious effects upon nutrition occur. We see this extreme impressibility, for instance, in the fact that the irritation of nerve tissue by the growing tooth, or the irritation caused by unsuitable food in the stomach and intestines is often enough to so affect the spinal nervous system as to induce convulsions, often ending in death. But, as Dr. M. Hall remarks, "the effect of such nerve irritation is much or little, according to whether good air, warmth and good diet have or have not kept up the powers of nutrition."

In addition to the fact, then, that newly formed nerve tissue is extremely impressible, we have another important fact to remember, viz., that the reconstruction of the fabric, in other words tissue change, goes on in children with enormous rapidity. Hence the demand for abundance of oxygen to aid the combustion of waste tissue, and enable its place to be taken by fresh nutriment to be assimilated—the necessary condition for its growth—cannot be overstated. Thus we are all aware of the fact of how much more food the child will eat in proportion to its weight than does the man; and there is likewise the coincident fact that proportionately more carbonic acid is exhaled, and more urea given off by the kidneys and skin than is the case in adult life.

We are now quite prepared for the corresponding result, that during all this time the vital forces have been exerted in a formative way, expended in the production of nervo-muscular vigour. Hence we all know that in cases where a child grows very

quickly its nervo-muscular energy is slight, and that the child is easily fatigued. And further, we notice that in cases where the growth and transformation of tissue are slower this nervous energy is greater.

What we have here seen in children, and in different individuals in their growth towards manhood forms the intent and point of the remarks under our next heading, viz.:—

3. *What are the influences daily at work militating against this healthy development.*—Placing them as they occur to us, they are:

First, as we have already seen, *impure air*. We have seen how great are the debilitating effects of the carbonic acid of the air of school-rooms, and how great the lack of oxygen. But we have, in addition to this impure, *rebreathed* air, other unhealthy materials inhaled. Certain animal odours are thrown off both from the lungs and surface of the body. Scales of epithelium are also found in the air, and these various organic substances form favourable feeding grounds for the spores of microscopic fungi which float in the air as dust, causing zymotic diseases.

Second: We have an undue amount of dirt and dust in the air of the school-room where there are many small pupils. They carry it on their clothes and boots. It is daily stirred up, and so is inhaled, producing irritating effects on the air passages.

Third: I have already stated that unequal warmth produces serious effects on many pupils. The child's body, for reasons we have already seen, is impressible in a very large degree to the favourable influence of heat, or the unfavourable effects of cold. Why this is, is evident. Cold, like all other sensations, impresses itself more readily on nerve-tissue in the young than in the adult. Hence, it readily chills the body externally, tending if prolonged to induce internal congestions—colds, and often worse. But not only are evil effects thus produced, but radiation of heat and evaporation from the surface of the body induce cold; and in many cases this is excessive from an insufficient or non-flannel clothing, which is the best from its being a poor conductor of heat. The mistake is made by many in thinking children do not need any warmer clothing than adults. But inasmuch as the vital processes are more rapid, and the child's body is more an automatic reflex of surrounding conditions than that of the adult, so any adverse circumstances, such as insufficient food or clothing, will produce more rapid and lasting injuries to the system than where such are acting upon the adult body where tissue change and vital force move more slowly.

Fourth: While the child's system tends to repair under favourable circumstances more rapidly than the adult's, so is it impressed more easily by injurious influences. It lacks the resistance which is volitional to a greater extent in the grown person. This latter is so great in some that the assertion has been made "that the man who resolves not to take a cold seldom does." In the child this power is wholly absent.

We have the more unfortunate circumstance present in the fact that the already delicate child, or the child weakened by the depressing conditions of bad air, poor food, and dress, has but little resistibility in its system to the onset of colds, contagious disease, etc.

That all these cases mentioned produce most unfortunate effects I deem it hardly necessary for me to assert. What teacher here, or what lady or gentleman present, does not know some boy or girl who, previously bright, sturdy and active, on going to school is seen for weeks and months gradually growing thin and pale, complaining of slight headache, and having a disordered stomach, with possibly other evils? Can we blind ourselves to the causes, such as the long weary hours for the child, whose natural condition and element is activity, sitting in air made impure by the breath of many others, and often with the emanations from their filthy clothes and bodies, and subjected to chilling draughts from attempts to remedy the humid air by wide-thrown open doors? Add to these that in some unfortunate children, with undue or precocious cerebral development, their young minds have impressed on the soft, forming and intried tissue great stores of facts, gained, not by healthy observation through the natural methods of sight and sound, but by a packing of the memory, through exciting the emotional desire of excelling, with multitudes of undigested facts, and we have a combination of unhealthy tendencies which do not augur well for the development of the race which is growing up.

II.—What Practical Methods Can and Ought to be Adopted for Remedying these Evils?

1. *Methods for the promotion of cleanliness.*—By the word cleanliness, in a sanitary sense, I trust we shall see that very much more, indeed, than many imagine is implied. Thus we can see that it may include the air we breathe, *i.e.*, whether it is pure or impure, clean or unclean; the air we see with, whether bright and clear, or dark and dismal, made worse through the presence in it of much dust—often of what Prof. Tyndall calls the "dust of disease." Again, it includes the water we drink and wash with, whether clean or the reverse, without meaning its taste or even its appearance but its actual freedom from the dust of disease—disease germs. The clothes we wear are an important factor here, since, as many are aware, germs of disease are borne most readily on the clothes, and very frequently on those of children. This latter point, too, is intimately related with the state of the skin next the clothing. Nothing probably in all our remarks is of greater importance than the state in which the skin of children is kept, both as to cleanliness and warmth.

Let us, then, very briefly discuss these various points:

(*a*) *Ventilation, or the cleanliness of the air of school-rooms.*—Upon this point I shall dwell at some length, believing, as I do, that untold harm is resulting from the insufficiency of abundance of warm fresh air in our ordinary school-rooms.

We have already studied the physical principles which make such supplies of fresh air necessary. Are such found present in our schools by the ventilation which is ordinarily supplied in them? It has been found by a Committee of the State Board of New York that there is in that State not more than one in every fifteen schools with means for a sufficient supply of wholesome fresh air; and that in those cases where it is good its excellence depends mainly upon open windows, and proper facilities for controlling them. It would not be possible, nor does it come within the scope of this lecture, to give at length the various methods which have been, and may be, adopted towards the end of supplying fresh air; but I shall endeavour rather to explain the principles of ventilation, and then merely indicate the directions in which improvements may be made.

The first point to be remembered is the constitution of ordinary air, viz.: Oxygen, 21; nitrogen, 79, with carbonic acid in small amounts, normally 4 in 10,000 parts, and aqueous vapour in varying amounts. We have already seen that this air in an inhabited room never remains long in the same condition, since each individual uses up about 24 cubic inches of oxygen per minute, and gives off about the same amount of carbonic acid.

In addition to this, however, the air given off from the lungs carries with it a very considerable amount of water, some seven grains, according to Fünke, every minute. Now this evidently must remain suspended in the air as vapour. It seems almost needless to calculate this, but we find that the amount of vapour which a cubic foot of air at 60° F. can hold is nearly half a pound. Now the point we wish to make clear here is that large amounts of vapour exhaled from the lungs of many children must most materially lessen the amount of oxygen per cubic foot of air. Hence we have the oxygen of the air of school-rooms rapidly diminished, by consumption first, and secondly, by displacement by carbonic acid of the water vapour. Now we readily conclude that new supplies would be needed, first to replace what has been converted into carbonic acid, and, secondly, to remove the aqueous vapour, whose condensing particles not only make a dank atmosphere, but actually occupy the space which is required to be filled with fresh air.

How then are we going to accomplish these desired ends? In the first place we must supply for each consumer of air—each child and teacher—an amount of space, according to an American Committee of Experts, of at least not less than 15 square feet of floor area in a room 14 feet high, or about 4 × 4 feet. In British barracks the regulation amount per man is 1,000 cubic feet. But supposing that each child gets a minimum of 1,000 feet, the air requires to be changed, as we have seen, thrice hourly, in order to be kept from feeling close. Reduce this cubic space by one-half, and, of necessity, the air must be changed twice as rapidly in order to maintain the air at the same degree of purity. Prof. De Chaumont, of Netley, informs us that the air of a room cannot be changed at most more than six times an hour—once every ten minutes—without producing a draught. So we

can easily see that Dr. Lincoln's minimum of 300 feet, in his Report to the New York State Board, is very little indeed for each child.

It will be noticed that we have not, in this calculation, made any allowance for the deleterious effects of water vapour, or the dust so constantly being set in motion by the children's boots, so that, at the best, this air will be imperfectly pure.

Dr. Lincoln tells us that in the New York schools, where best done, the needed supply has been obtained by the judicious use of windows as inlets for fresh air. But before there can be an ingress of fresh air into a room there must be an egress for the internal impure air. All are perfectly well aware of the laws upon which this ingress and egress depend. They are, first, the law of expansion of gases by heat, and, secondly, the law of diffusion of gases, which is inversely as the squares of their densities.

Now this expansion of gases by heat necessarily makes them lighter; and thus Pettenkofer has found that at all times, whenever the internal atmosphere is higher than the external, there is an egress of warm air and an ingress of cold air—in other words, there is always a current moving towards the house. He found that in a house made of brick, with a capacity of 2,650 cubic feet, with all the cracks plugged up, and with a difference of 34° F. between the external and internal temperature, spontaneous ventilation went on through the room at the rate of 1060 cubic feet of air per hour.

Thus we have seen that both the agencies, diffusion and expansion of gases, would be at work in this case.

Take an ordinary case, however, and we know that the warm air rises to the top of the room, and escapes by apertures there, or if not, it is gradually drawn up the chimney by the draught of the stove. In most of our ordinary schools, however, there has not been any regular arrangement made for the supply of the air which is to take its place; but it enters principally through cracks in the floors, under the doors, and sometimes by the windows. But there are objections to both of these methods, especially the first, since great currents of cold air are being continually drawn along the floor, creating a draught, and chilling the feet of all with, often, disastrous results. Indeed, I have found what any of you may find, that in such a room there is a difference of often 8° to 10° F. between the temperature at the floor and six feet above it. The old principle of keeping your feet warm and head cool is exactly reversed.

The advantage of bringing air in by the windows is that a cold current enters the room at the top, which gradually becomes warmer in its descent towards the floor. The great objection to this is that a cold draught too often strikes down upon the scholars, or at least on such of them as may be seated near windows.

These methods failing, let us see what can most easily be done so as to improve the conditions commonly found in our school-rooms. Let us suppose an ordinary room with a large stove in it, as is often found in country schools. Here an outer metal cloak of zinced iron may be very easily placed around it, resting on the floor; and a current of fresh, cold air can be delivered by a tin pipe opening under the stove through the floor, and connecting with the outside fresh air. This air being warmed by the sides of the stove will rise, and the draught will constantly introduce fresh air into the room. Such arrangements may be varied indefinitely according as the position of the room, stove, etc., may prove most convenient. For instance, a double air shaft, according to what is known as McKinnell's design, may be used. However, for the various reasons which I have here and there stated in this address, I believe the most effective means of obtaining a uniform diffusion of fresh air, and at the same time of keeping the air of the room at something like an equalized temperature, is to have the cold air drawn off at the bottom of the room in whatever manner may be deemed best, and have the fresh air warmed and brought in at the upper portion of the room, *e.g.*, where a well-protected inlet at the top—say the window—is made, while a grate stove in the winter, and a candle or small gas jet in summer in the chimney, may serve to create a draught up the chimney. Here we have the two principles well carried out.

Another method which it seems to me could be most efficiently carried out in a school where, let us say, there are eight rooms—four in each flat—is the following:—Let there be at one part of the room, near the floor, an opening in connection with a ventilating shaft, which has at the top a fan, with outward motion of the air, ever kept revolving by

a windmill at the top. This will be a means for getting rid of the foul air. To get fresh air a cylinder may connect with the fresh outer air at the top of the shaft, and be let into the room near the top. The diffusion of the fresh air may be obtained by a tube, carried from such vertical cylindrical shaft horizontally around the top of the room, with openings in it increasing in size as they increase in distance from the shaft.

It will have been noticed that in discussing these principles of ventilation I have ever endeavoured to keep in view the desirability—I might add, the necessity—for not only not chilling the air too much by the introduction of cold outer air, but also of equalizing the air of the room, which in most accidental ventilation, and in many systems of ventilation, is often neglected. But we must pass on to the question of, viz.:—

2. *Sufficient supplies of light.*—Many statements have of late been given of experiments made concerning the question of near-sightedness (*myopia*) in the pupils of public schools. Germany, Russia, Switzerland and France have, by their statistics, shown that the disease of *myopia* is epidemic everywhere in the schools of those countries. Thus it has been shown that in the high school of Chemnitz, Saxony, in eight classes, the proportions of near-sightedness were respectively from the lowest class up, 10, 17, 20, 25, 35, 44, 44, 64 in the 100. Very recently Dr. Mittendorf, of New York, has given the results of his examinations, and has found that in grammar school No. 58 there were $8\frac{1}{2}$ per cent. suffering from *myopia;* in grammar school No. 35, of 630 Germans $17\frac{1}{2}$ per cent. were afflicted with the disease. In all cases it has been found that *myopia* increased with the length of school life. Dr. Mittendorf remarks that the great prevalence of this and other eye diseases in children is due to poor arrangements for light in most school-rooms; and when good, to the placing of the seats so that the rays of light strike the eye in the worst possible way. But, in addition to this, the poverty of the blood and weakness of nerve and muscle fibre, which are produced by bad ventilation, are, according to Drs. Loring and Derby, additional factors tending to this end.

But to proceed with the question of light in schools, we have two distinct problems to be discussed:—1st. The insufficiency of light; 2nd. The bad way in which the rays of light strike the eyes.

1st. *The insufficiency of light.*—All know that the modern theory of light teaches that it moves along in waves, and that light proceeds through all homogeneous media in straight lines from any object, and that these rays radiate from such an object in every direction.

All know, too, that light is transmitted through different substances very differently, giving us the terms transparent, translucent, opaque, but that the most transparent still arrests a portion of the light. Thus Dr. Young estimates that the horizontal sunbeams which pass through about 200 miles of atmosphere ere reaching the eye possess only $\frac{1}{3000}$ of their original intensity.

Thus we are quite ready to understand that, in regard to the effect of light on the eyes, it must vary both according to the intensity of the source and the amount which is allowed to reach the eye.

But we have referred to another point, viz.: that light passes in straight lines. Thus we have often noticed that a ray of light entering a room by a slat in the shutter is mostly localized in a certain direction, that it gives but little light to the rest of the room—what diffusion there is being due first to the law of *refraction of light*, caused by the particles of dust in the course of the ray refracting the rays; and second to another law, *the reflection of light*, by which small amounts of light are reflected into the surrounding portions of the room. By some beautiful experiments Prof. Tyndall has shown that the course of such a ray of light disappears if it is allowed to pass into a chamber where, the air being at perfect rest, the dust has settled upon the bottom and sides of the chamber. Hence we have light diffused by refraction and reflection. But further reflection varies according to the nature of the reflecting surface. Thus a mirror or burnished metal reflects nearly all its light, but mostly in one direction, following the *law of incidence.* A rough surface, or even one such as a white wall or white paper, has every slight unevenness reflecting the light at different angles. Hence we have a scattering of light; and it is entirely to this *secondary radiation* from particles of the air, from the clouds and water vapour, along with the brighter objects in nature, that we owe the generally diffused light of day.

Hence summing up we have, the amount of light which can get into any school, dependent upon :—

1st. Intensity of the rays, dependent upon :—(*a*) Freedom of air from clouds; (*b*) The obliquity of the sun's rays; (*c*) The goodness of the reflecting surfaces, and the direction of the reflected rays.

2nd. The number of rays which can get into a room by means of the size of the window.

Now following up these facts, we notice that, as the rays of light enter the window in right lines, it is only by the diffusion by secondary reflection, either outside the window, or by the particles in the atmosphere of the room and the walls of the room, that a space larger than the window becomes illuminated. This is well seen by the brightness of that portion of room into which the rays of the sun shine directly. But again we remark that the amount of light, or the number of rays entering the room, is subject to the same rule as the light emanating from a candle placed in a dark room. Rays radiating from it pass outward in every direction. Now, should it supply a given amount of light, say x, to a room with a diameter of one foot, to a room of two feet diameter, each foot must receive just $\frac{1}{4}x$. Hence we have daily an indication of what we all ought to do, either as teachers or as individuals.

Thus, at times, it may be necessary to moderate the light by curtains, oftener it is necessary to use every means to increase it. Various methods aid us in this respect. The first, of course, is enough of window space. As the rays of light have a greater intensity in proportion as they approach the vertical, we have one invariable indication, and that is to have the top of the windows as near the ceiling as possible. Hence the farther will rays of light be enabled to reach directly in the room. As a rule then, we may say, that there ought to be no seat in the school which does not receive a certain amount of *direct* rays of light.

Again, if it were possible, we would say that the windows giving this light be placed in the south; but for several reasons this might be found difficult, while if the windows be large enough in proportion to the room this will not be necessary. The rule for allowance in depth of a room for purposes of proper light is that no window shall be required to throw light to a horizontal distance greater than one and a half times its own height, and this is when supposing its height to reach quite near the ceiling.

Again, another point which must be observed is to have the light coming into the room from at most two sides; at any rate, it should be so arranged that the oblique rays from windows on two different sides of the room should not strike the eye at the same time, and this fault is only increased where the light strikes the eye obliquely from windows in the various sides of an octagon, as figured in an article by Dr. Lincoln, New York State Board, and in a school building with which, in my youth, I was very intimately acquainted.

Only one word on the reason for these precautions needs be said. All know that the pupil contracts and dilates with the amount or intensity of the rays of light striking the eye. Now, in no case are rays of light, coming in windows on different sides of the room of quite the same intensity, hence, the pupil, or rather the muscles of the iris, will be more or less fatigued with the constant attempts to regulate the amount of light received. Not only this, but these rays of different intensity are continually impinging upon the retina; and it, too, receiving unequal impressions at different angles, will tend to have its equilibrium disturbed by what we may term the strain upon it. Again, it is most ill-advised to have a glare of light striking upon the eyes of the children at work. Its irritating effects may be, and are, very injurious. The effects of insufficient light, either from insufficient windows, windows not large enough, or from the obstructions external to the room in the shape of verandahs, trees and buildings, are to bring the eye too near the book, or to strain them to see figures on the black-board, and so gradually by fatiguing the muscles of the eyeball and iris to produce short-sightedness.

But, ladies and gentlemen, I am afraid that I have much exceeded the limits of the time allowed me. The duty of cleanliness of drinking utensils, from the possible transmission of contagious disease from one child to another, the desirability of having lavatories both for the comfort and health of the children, and the many dangers common to

all waters—which, from the larger opportunity for harm, ought to be especially guarded against in the drinking water of schools—are all subjects which, had we time, might have engaged our attention with profit. However, we must close. The field in which it is the duty of the school sanitarian to labour is indeed a large one; and in this field I need hardly say that the teachers themselves, who are equal sufferers with their pupils, ought to be eager and earnest workers.

We have fortunately in our school inspectors a *vis agendi*, men who, I have no doubt, are gradually feeling their way towards the introduction of improvements; while I deem you extremely fortunate in having an inspector, a medical man, whose peculiar duty and pleasure it will be to see that the health and comfort, both of teachers and pupils, have thorough provision made for them by the trustees, and parents of the children. But it is not to be supposed that the inspector can undertake this task of school sanitation unaided. The efficiency of this work must largely depend upon the intelligent co-operation with him, not only of the teachers who are more personally interested, but of the public generally, the welfare of whose children ought to be to them the highest end to be sought. Hence we, as a Board, expect, and the Government expects—what, I am happy to say, is being heartily given—cheerful and willing co-operation not in this one question of school sanitation alone, but in the very many others with which we, as a Provincial Board, have to deal. And this will be best accomplished by every municipality establishing an active Local Board of Health, to whom the people ought to yield a hearty allegiance and bow, in what may at times seem the individual interest, to the higher public good.

But all must be happy in knowing that we are progressing, though, as Tennyson says:—

> "This fine old world of ours is but a child
> Yet in the go-cart. Patience! Give it time
> To learn its limbs: there is a hand that guides."

Our work as Sanitarians has, as yet, hardly more than begun. Zymotic diseases and preventable causes of death are everywhere rampant, and in working for their extermination we will be working for interests as high as those of repelling with patriot hearts and sturdy arms the inroads of the foreign enemy of our country. These enemies of health are all the more potent, because often invisible. Let us then work, gaining—

> "Point after point; till on to dawn, when dreams
> Begin to feel the truth and stir of day!"

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